OIPE JC67 MAR 08 2004 PATENT & TRADEMARK

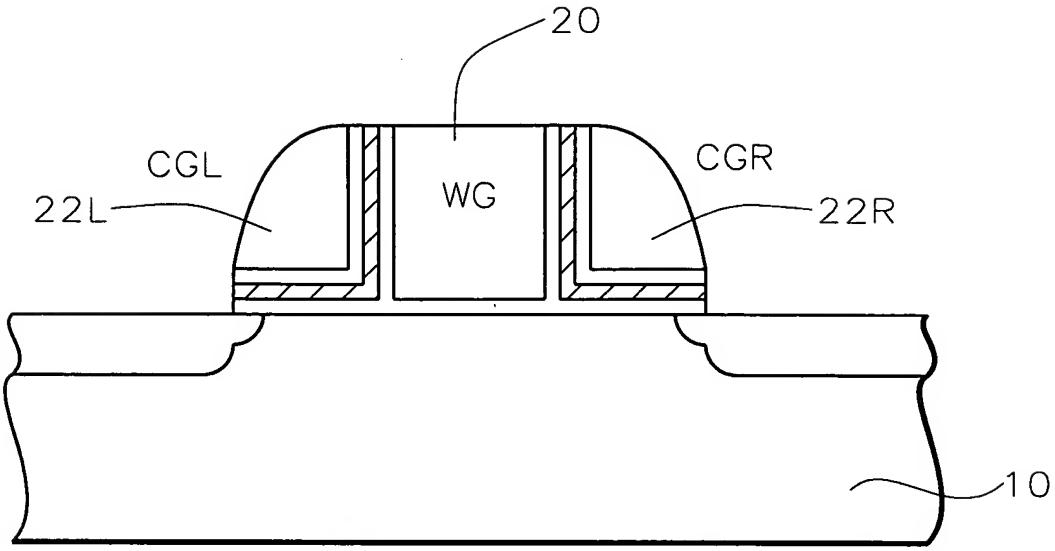

FIG. 1A Prior Art

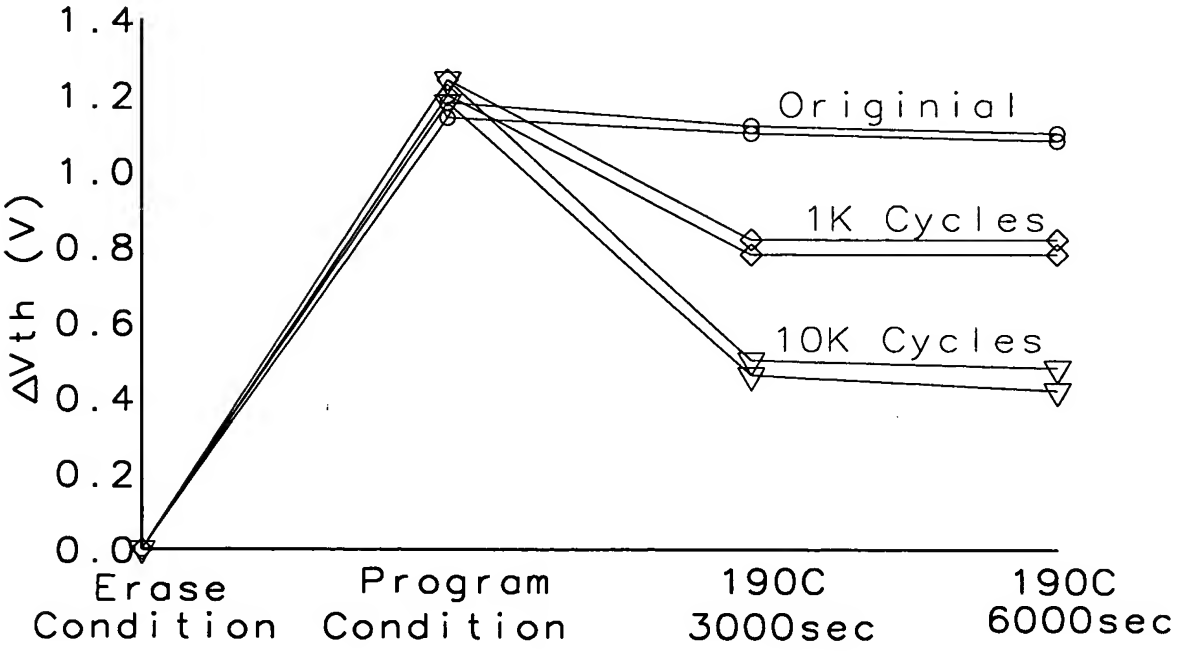

FIG. 1B

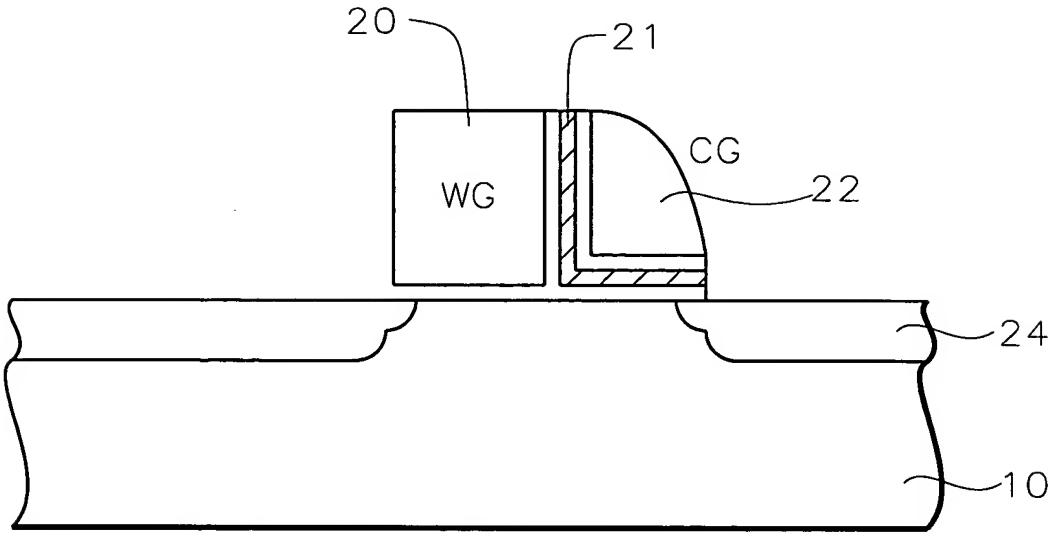

FIG. 2 Prior Art

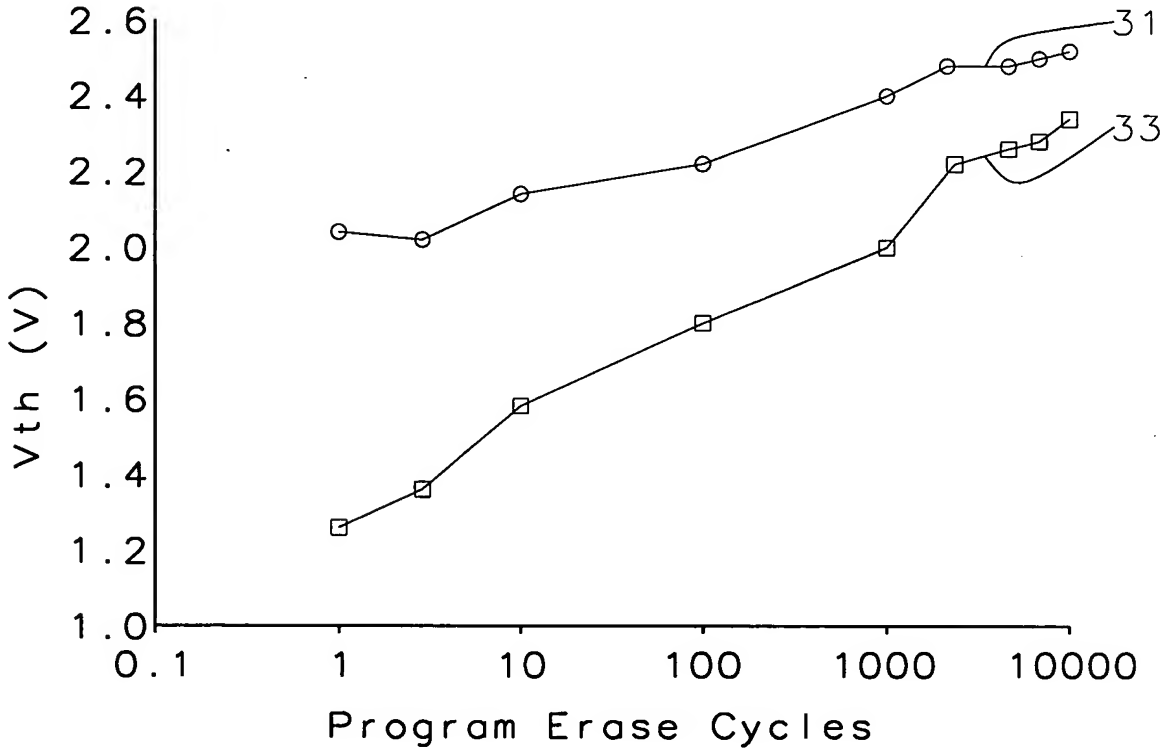

FIG. 3

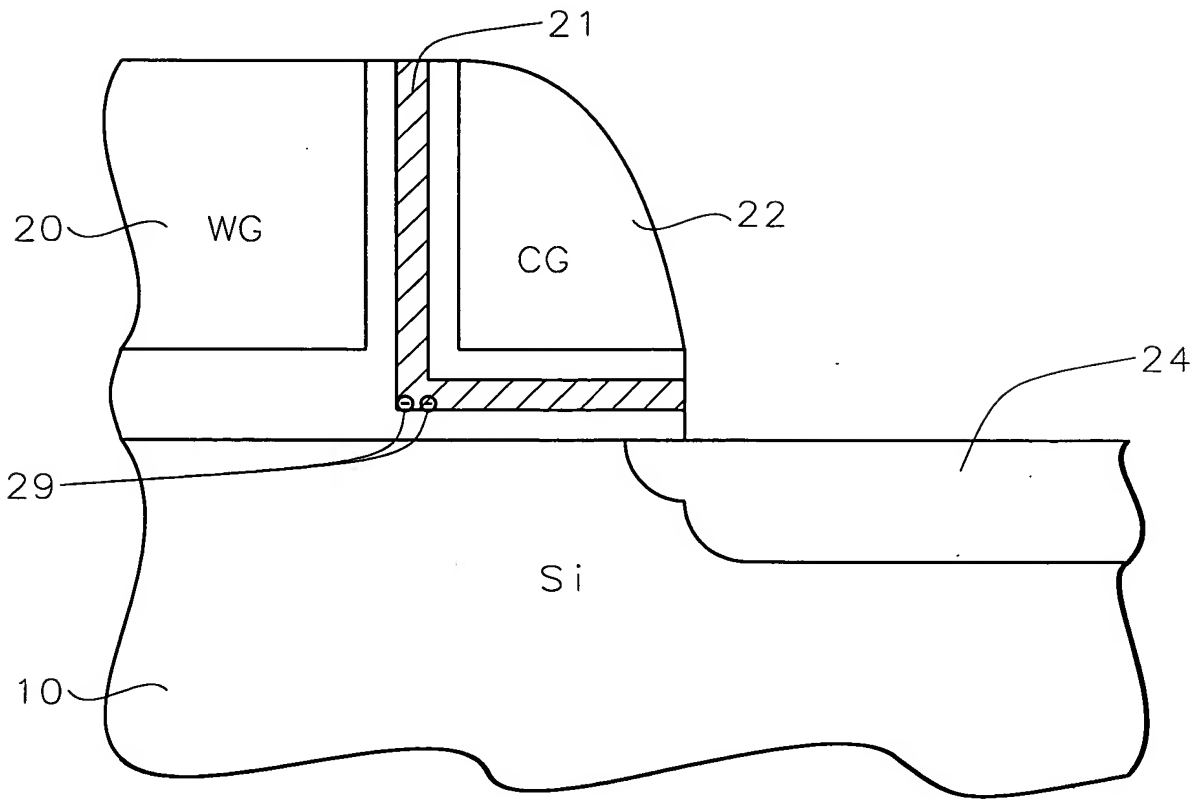

FIG. 4 Prior Art

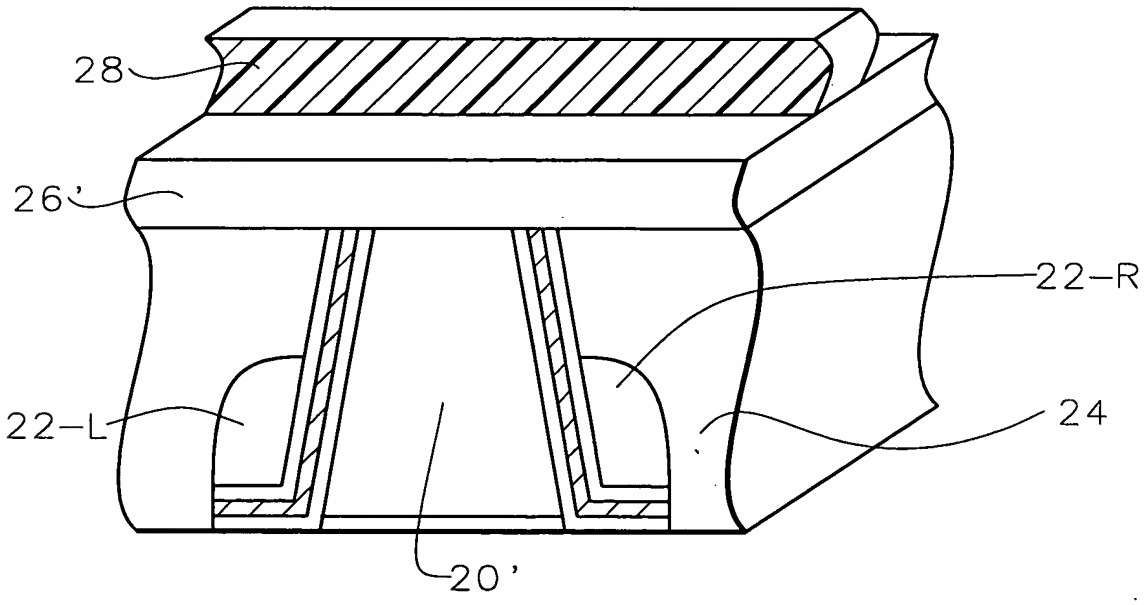

FIG. 5A Prior Art

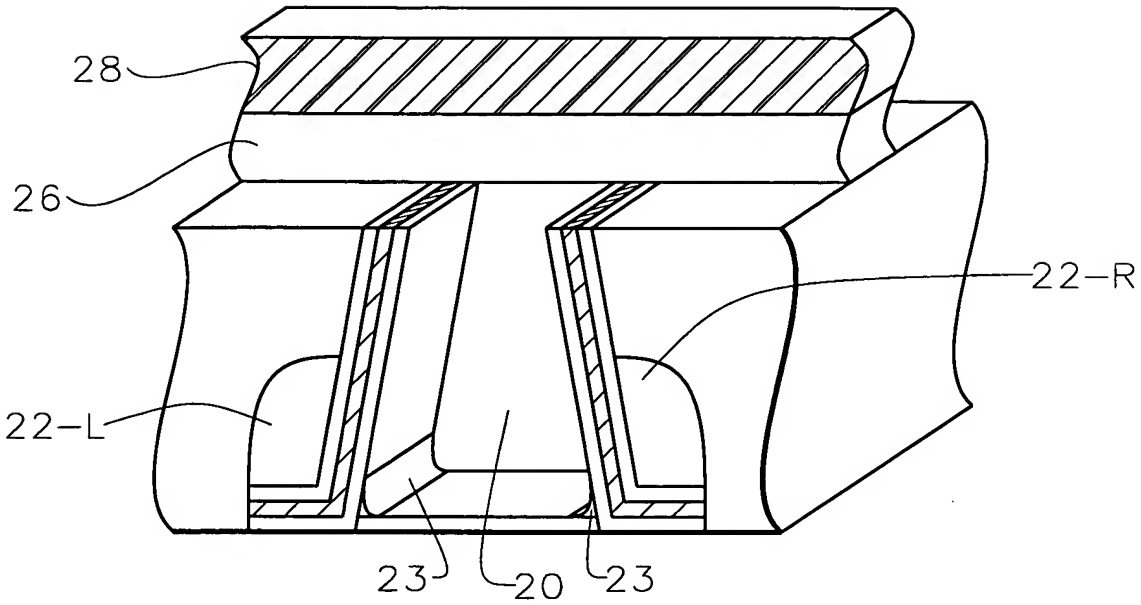

FIG. 5B Prior Art

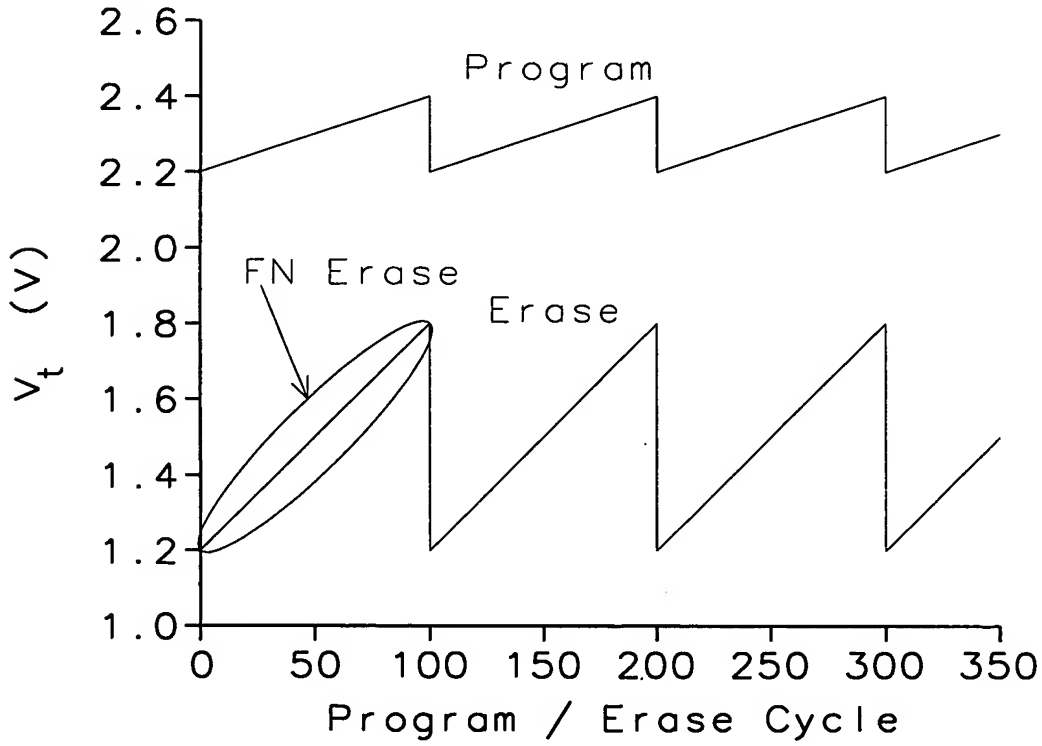

FIG. 6

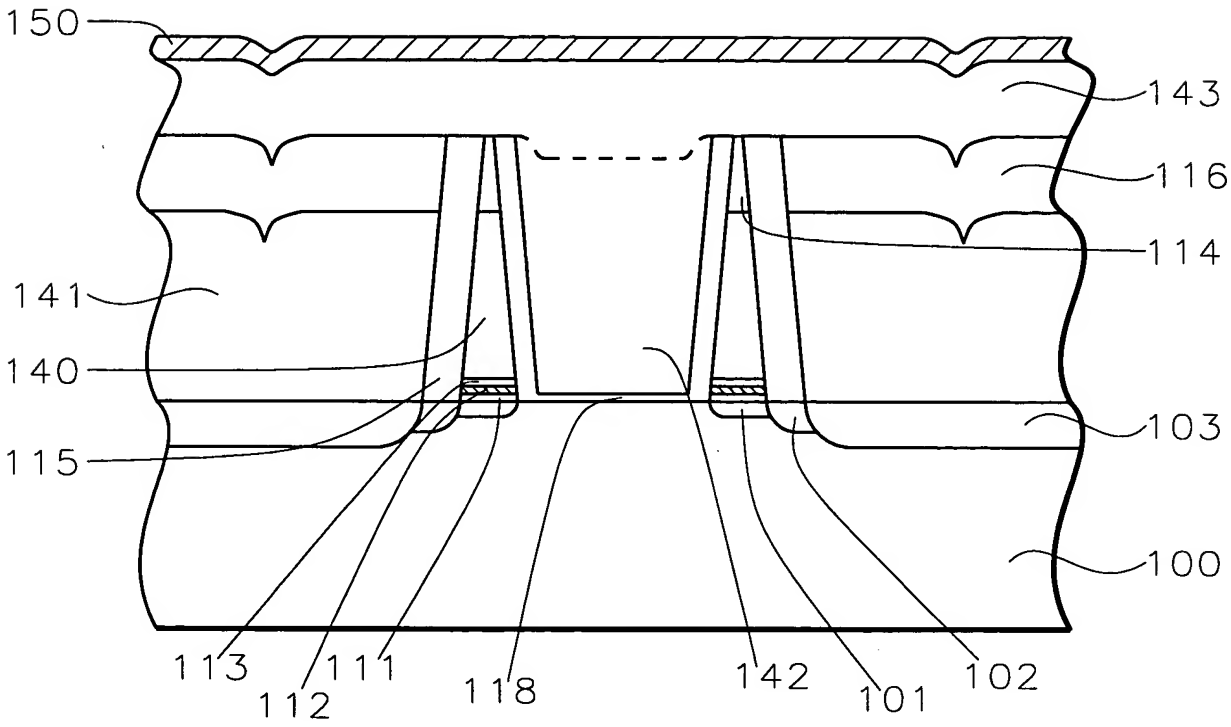
150
143
116
114
141
140
115
103
100
113
112
111
118
142
101
102

FIG. 7

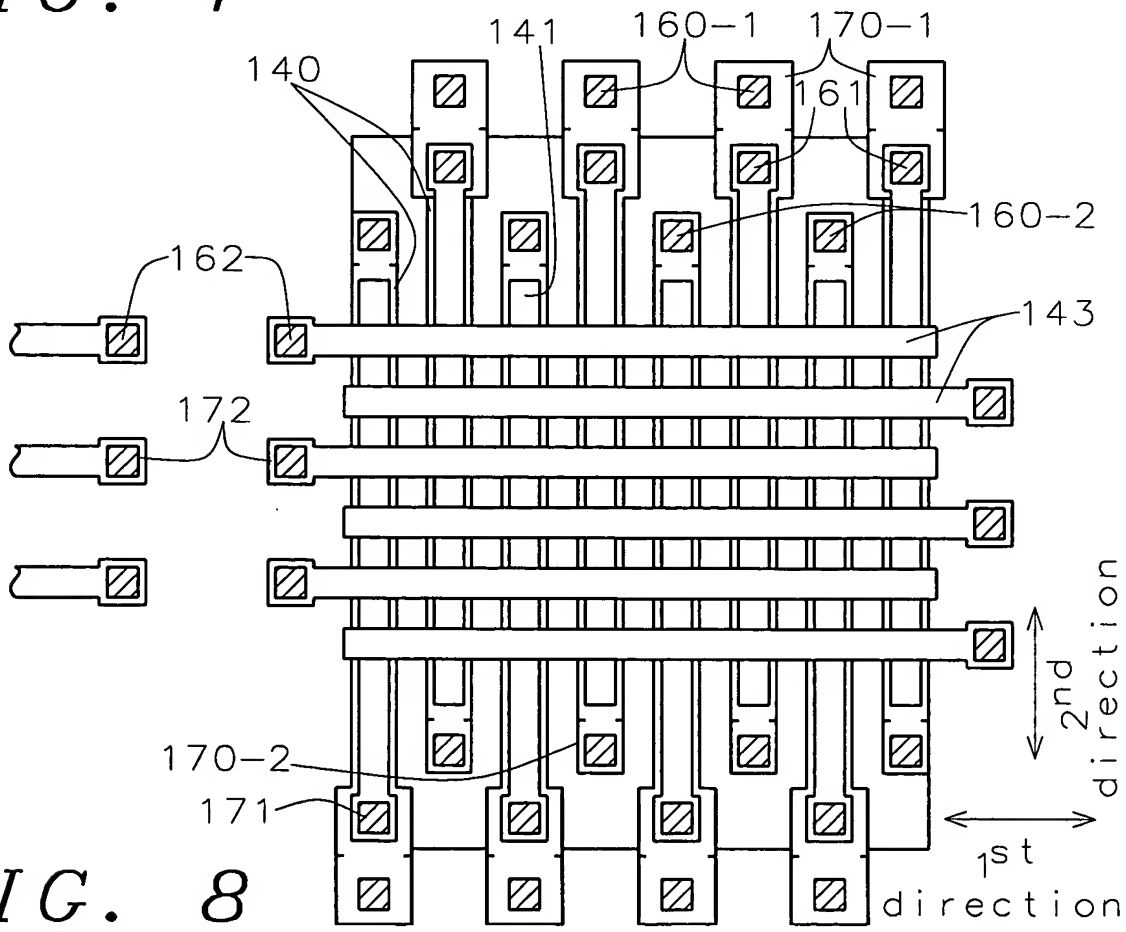
141
160-1
170-1
140
161
160-2
162
143
172
170-2
171
2nd direction
1st direction

FIG. 8

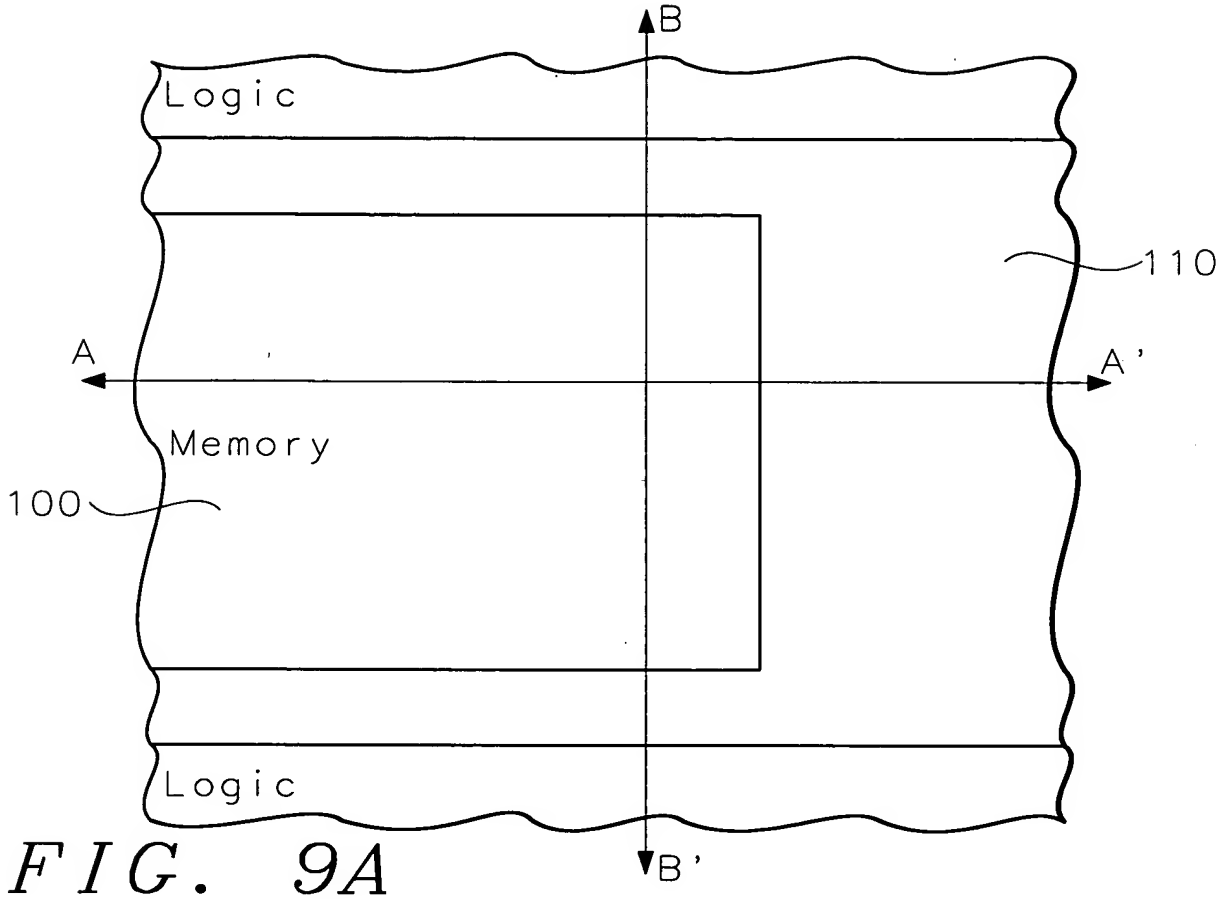

FIG. 9A

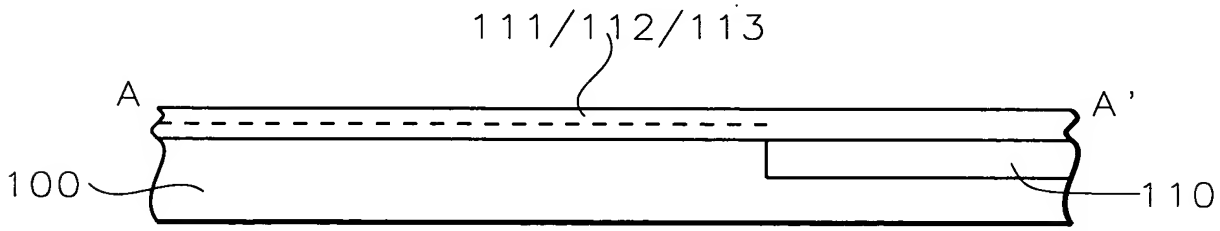

FIG. 9B

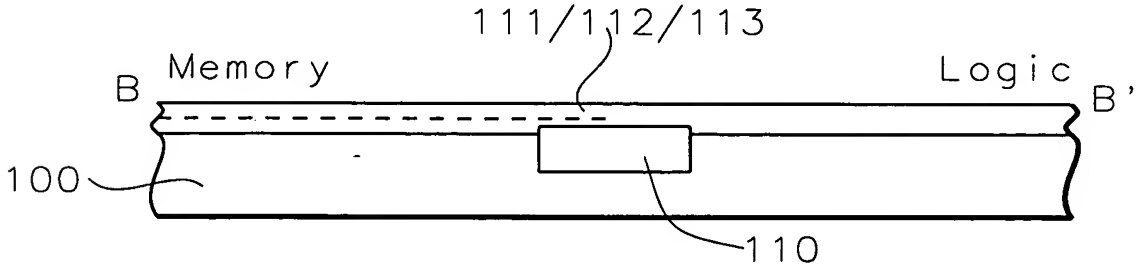

FIG. 9C

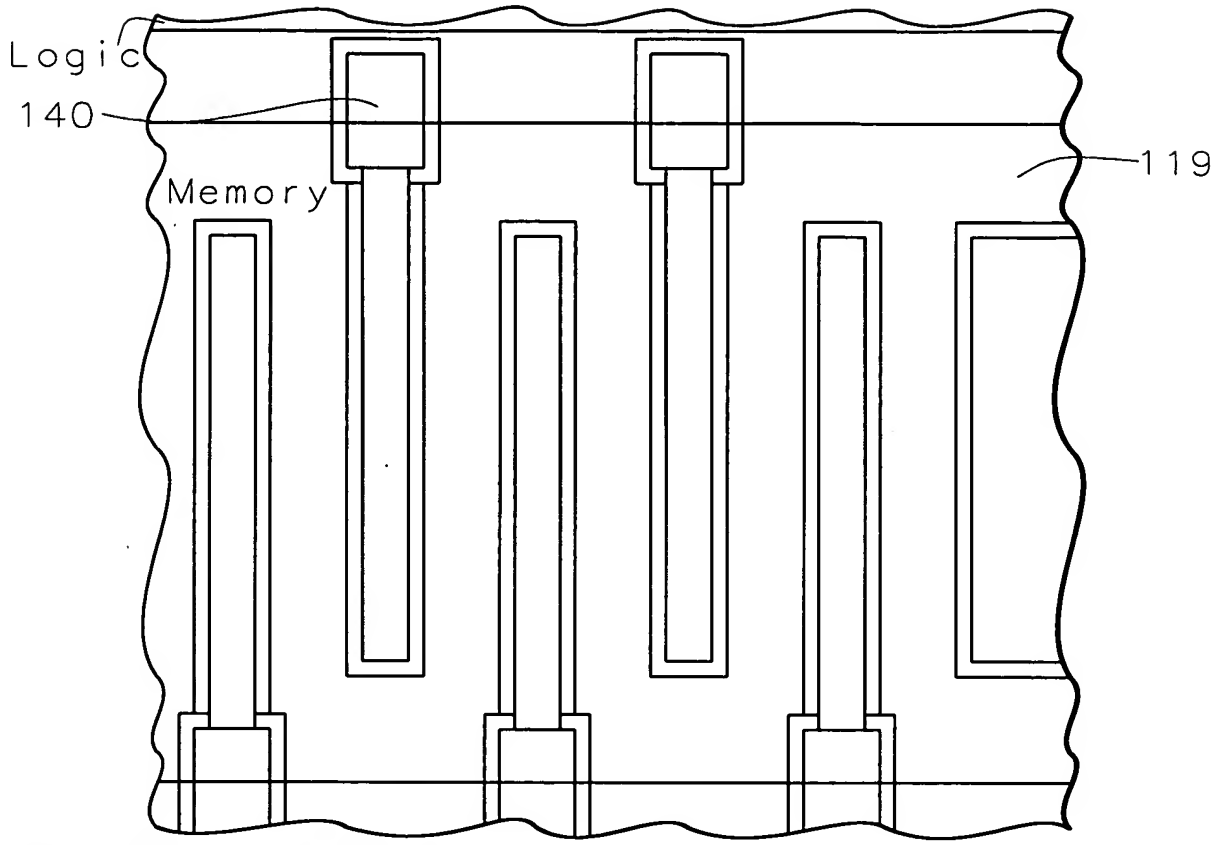

FIG. 10A

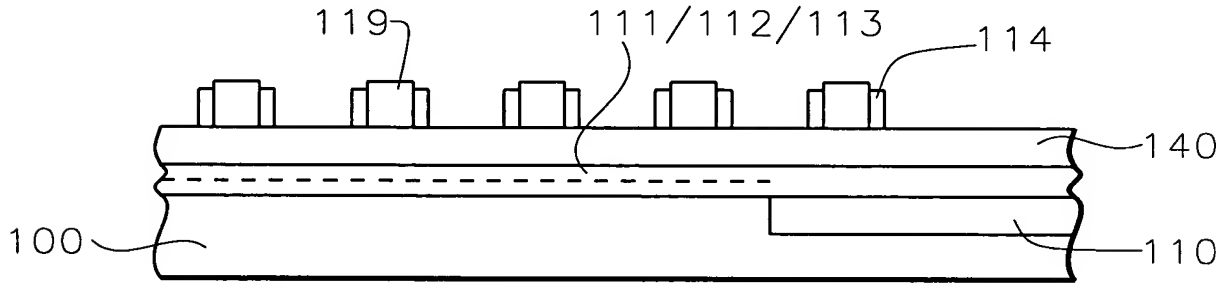

FIG. 10B

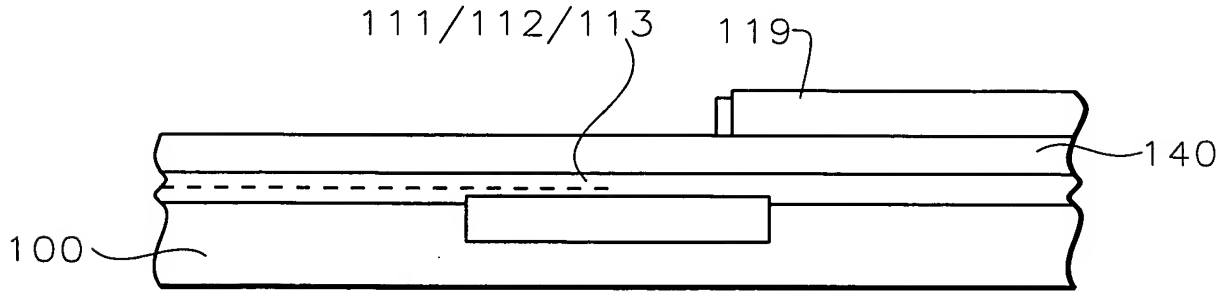

FIG. 10C

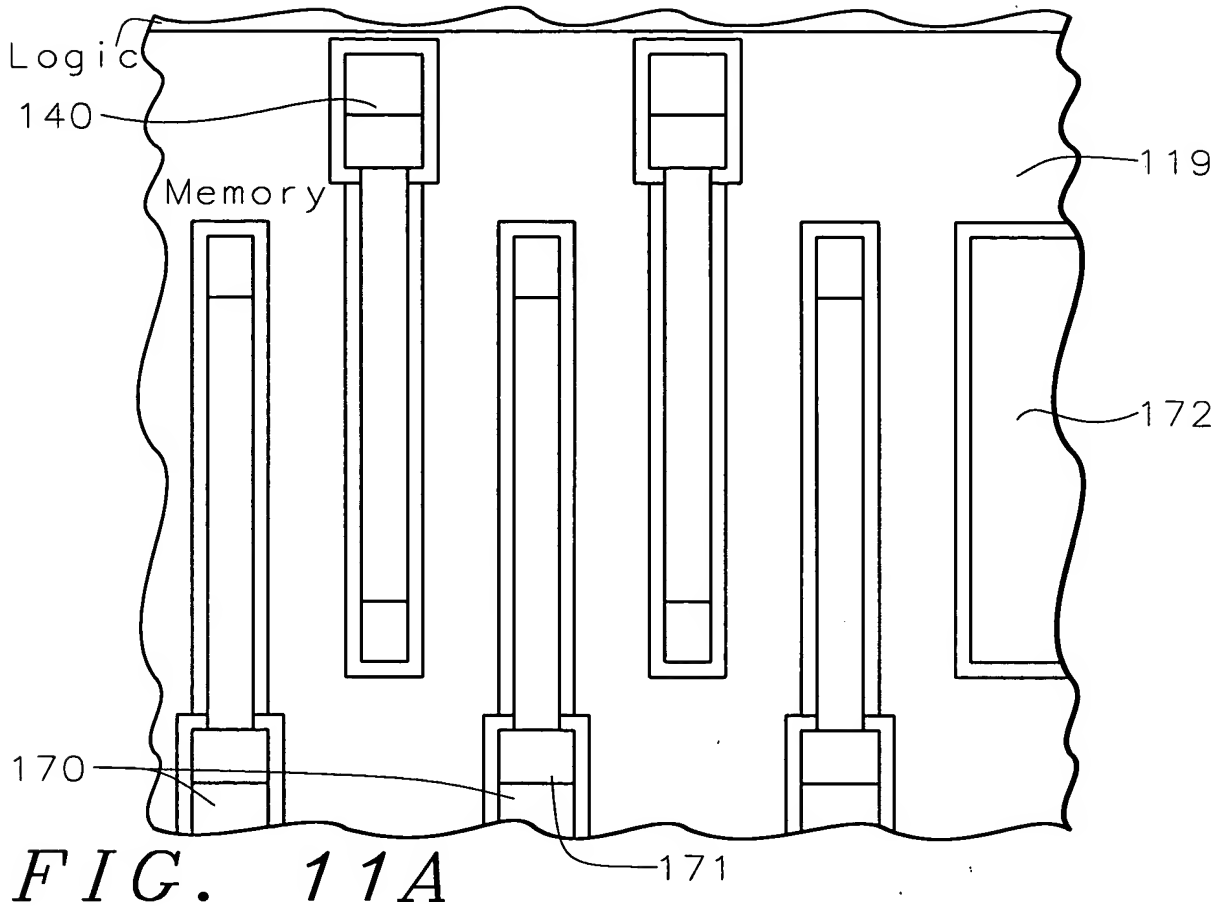

FIG. 11A

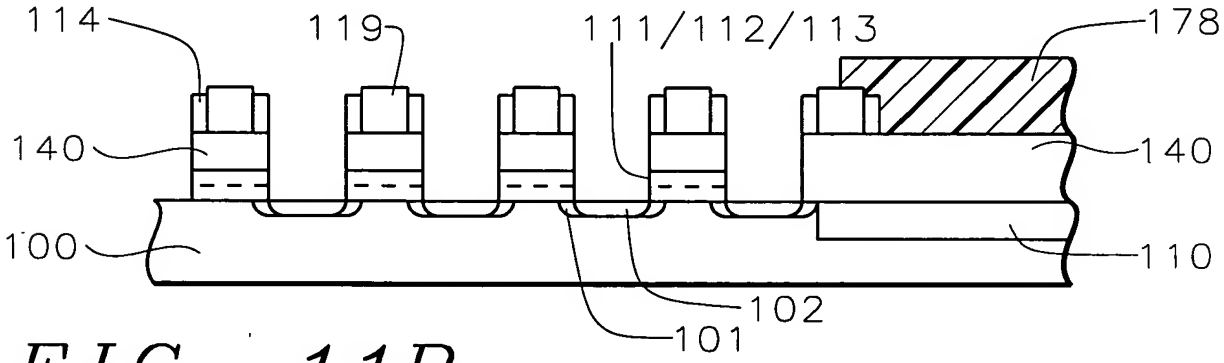

FIG. 11B

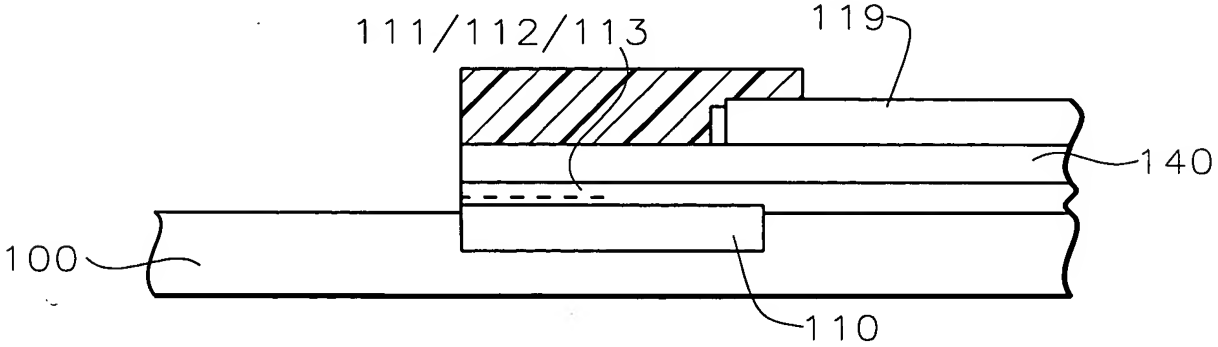

FIG. 11C

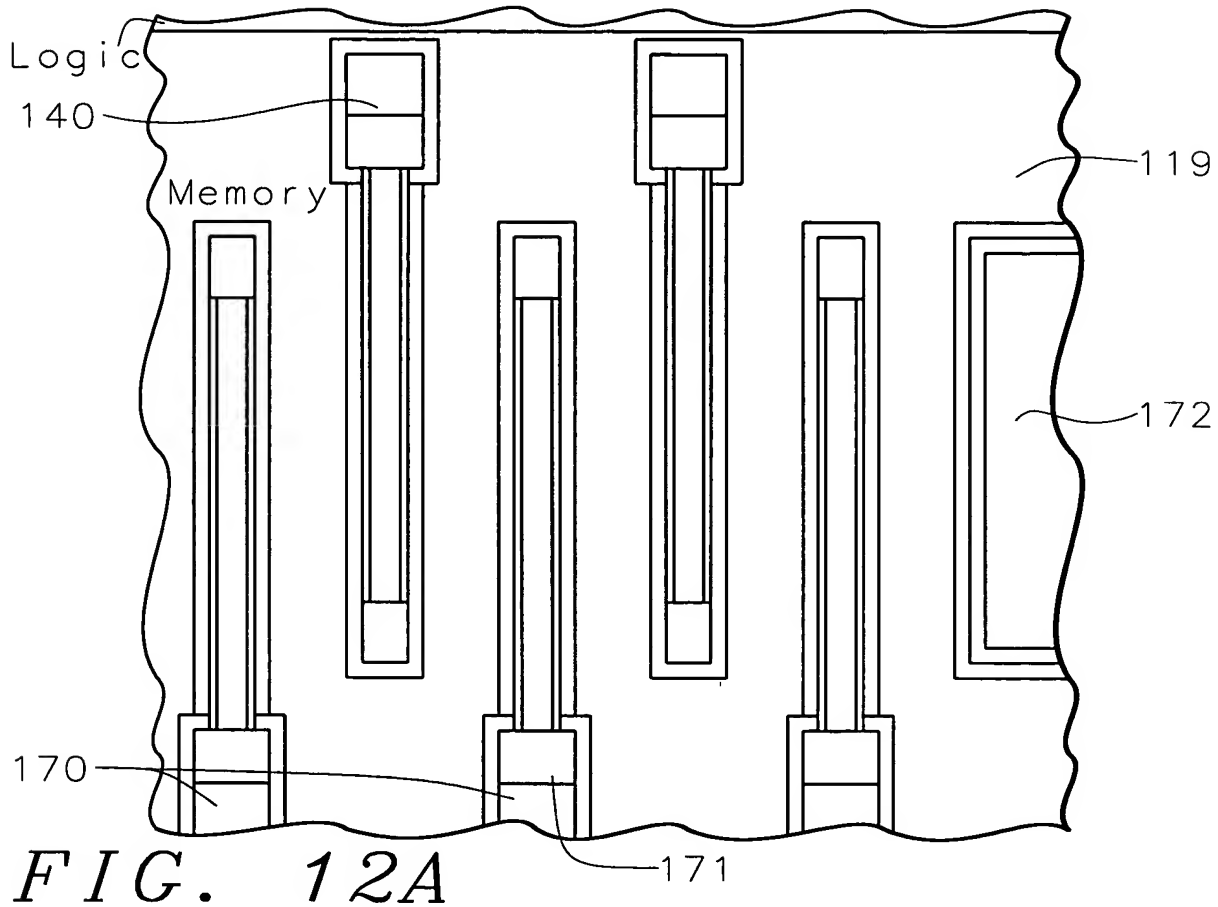

FIG. 12A

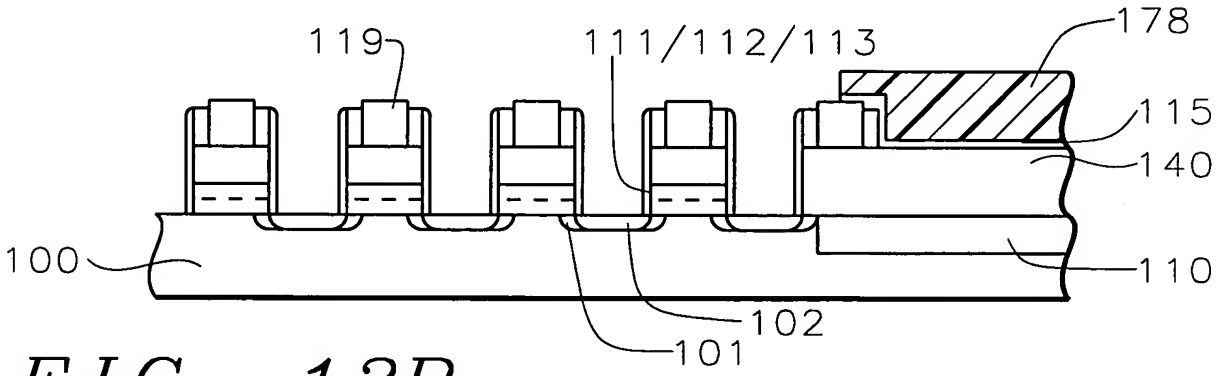

FIG. 12B

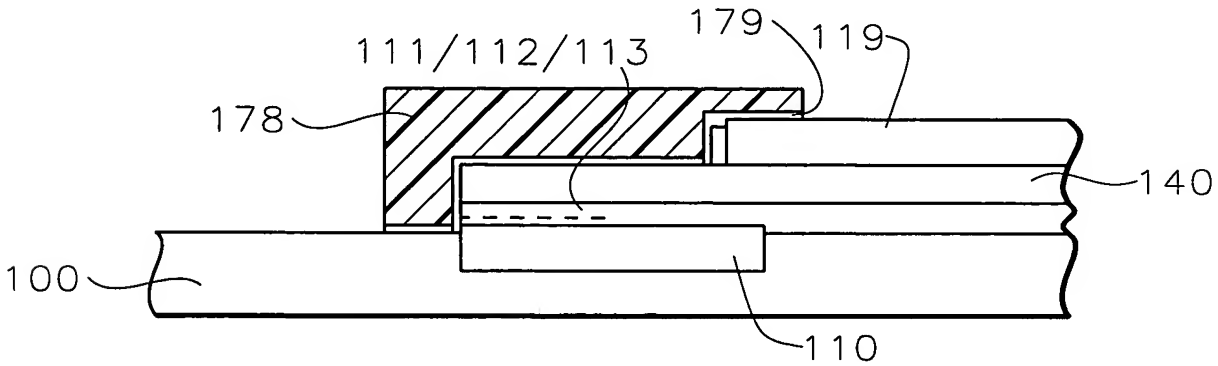

FIG. 12C

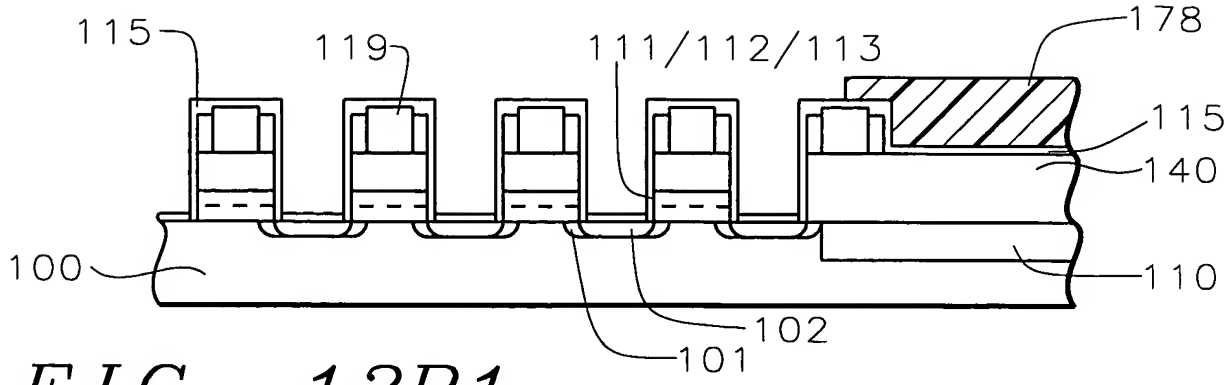

FIG. 12B1

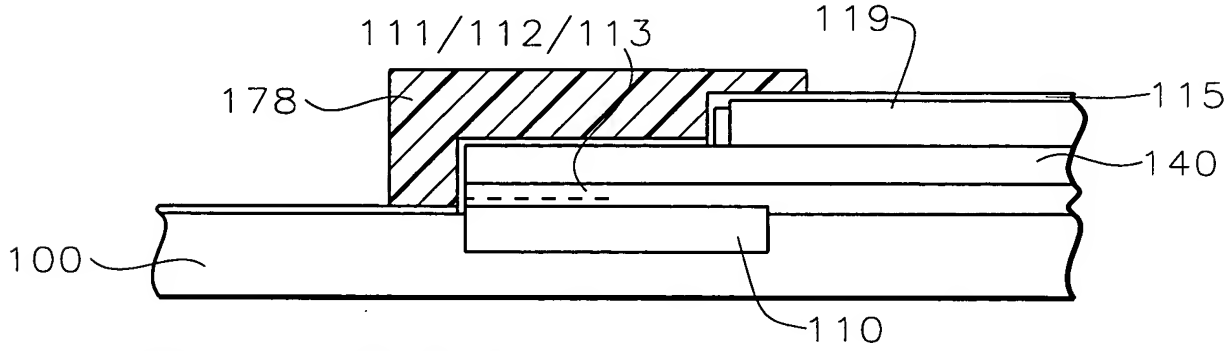

FIG. 12C1

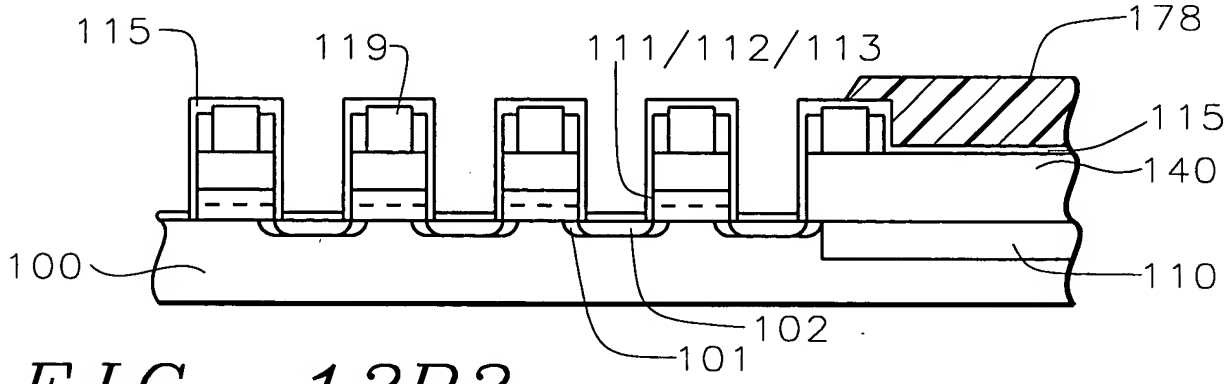

FIG. 12B2

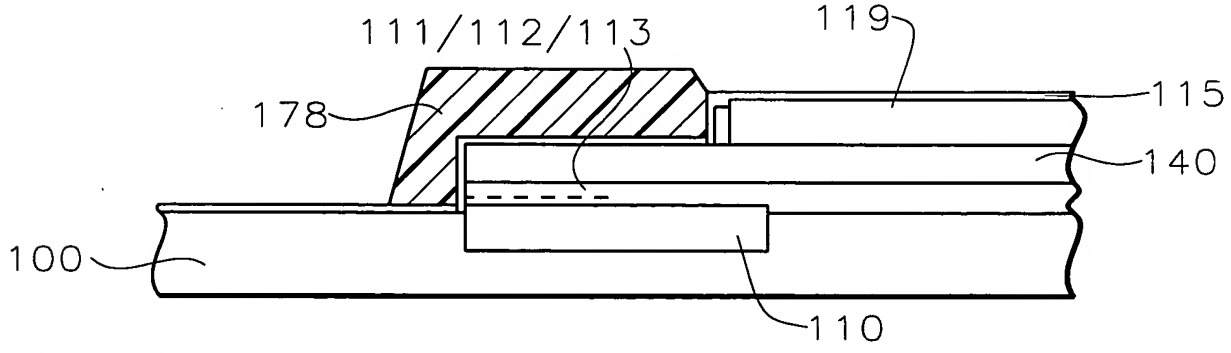

FIG. 12C2

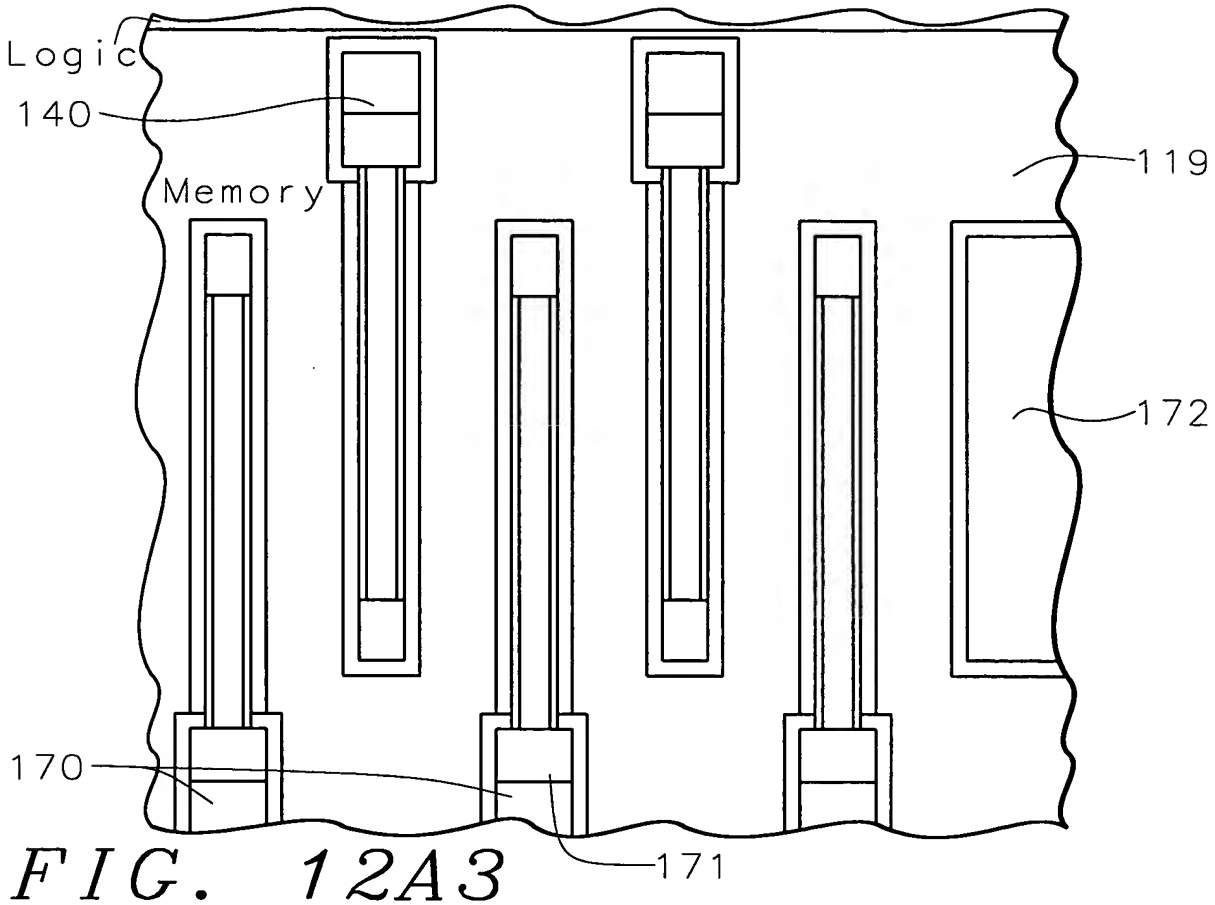

FIG. 12A3

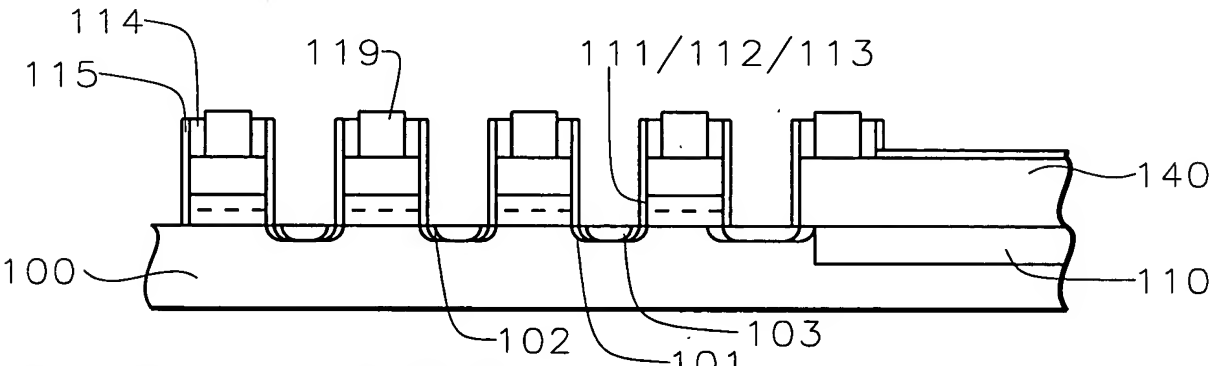

FIG. 12B3

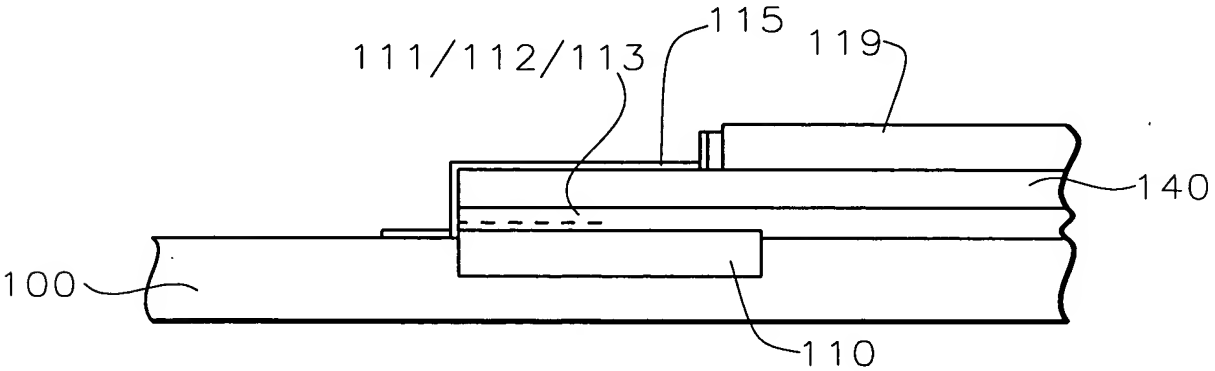

FIG. 12C3

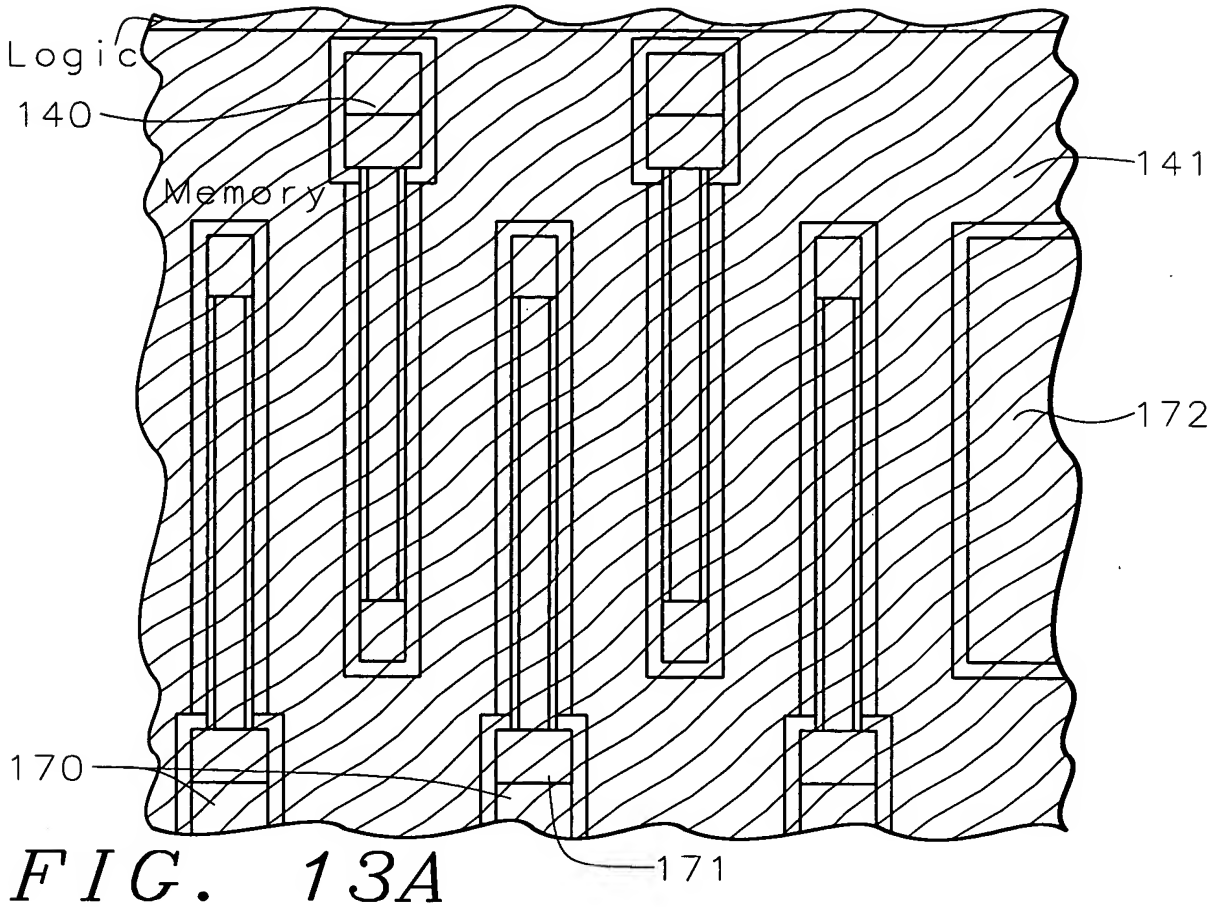

FIG. 13A

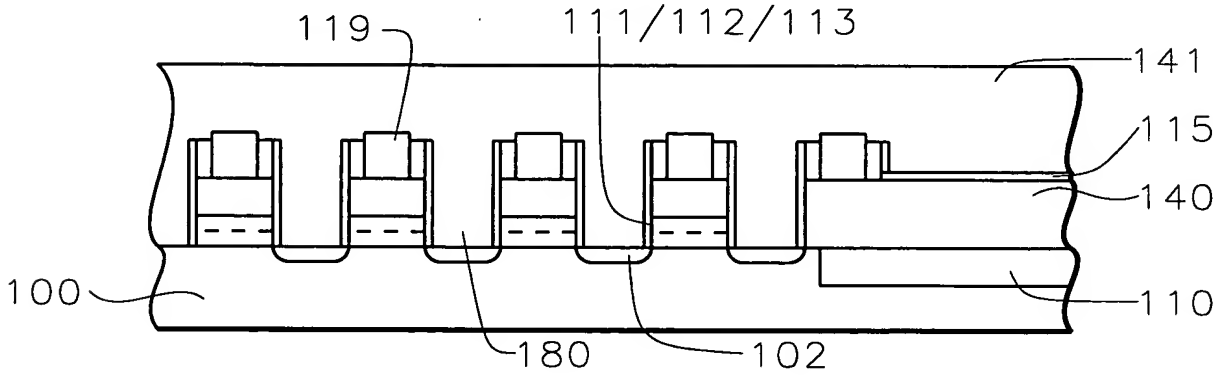

FIG. 13B

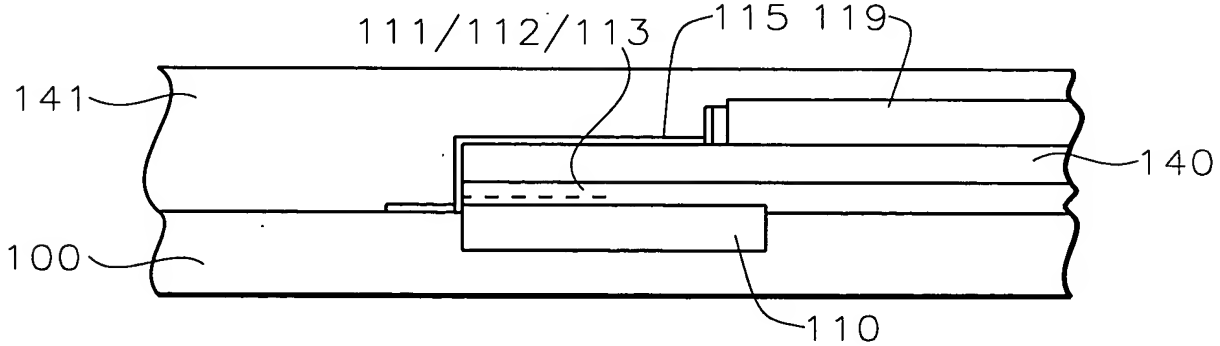

FIG. 13C

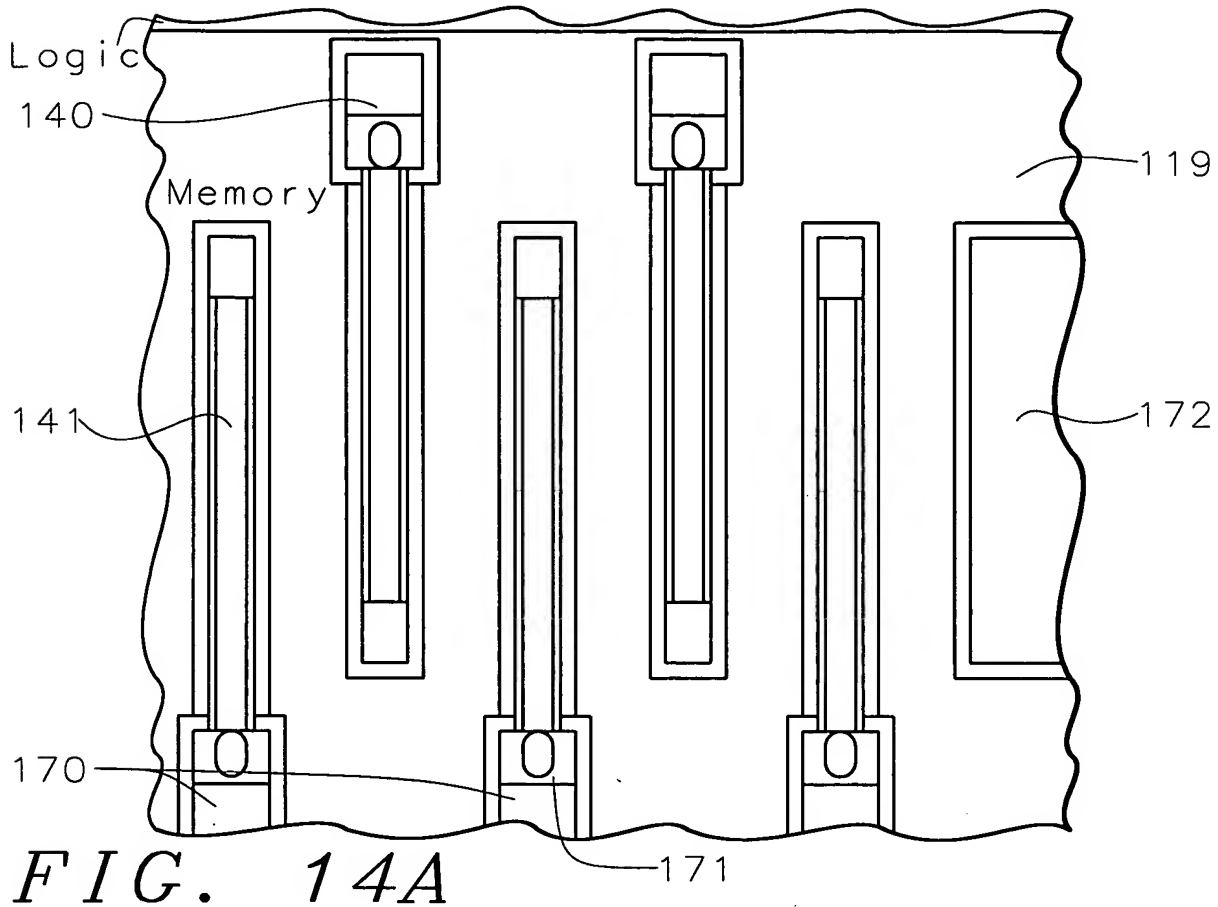

FIG. 14A

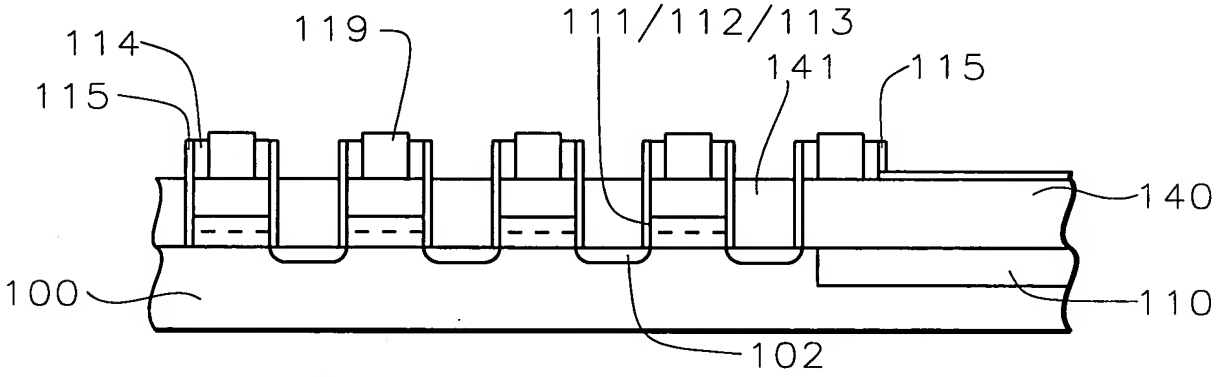

FIG. 14B

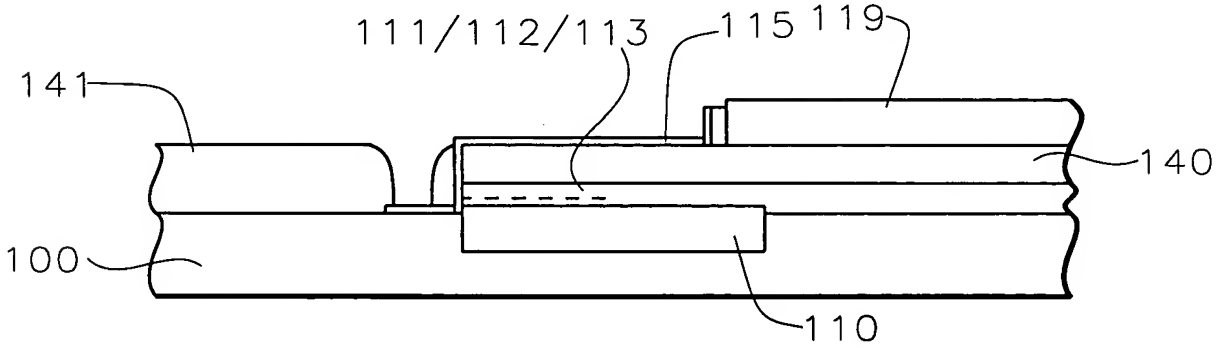

FIG. 14C

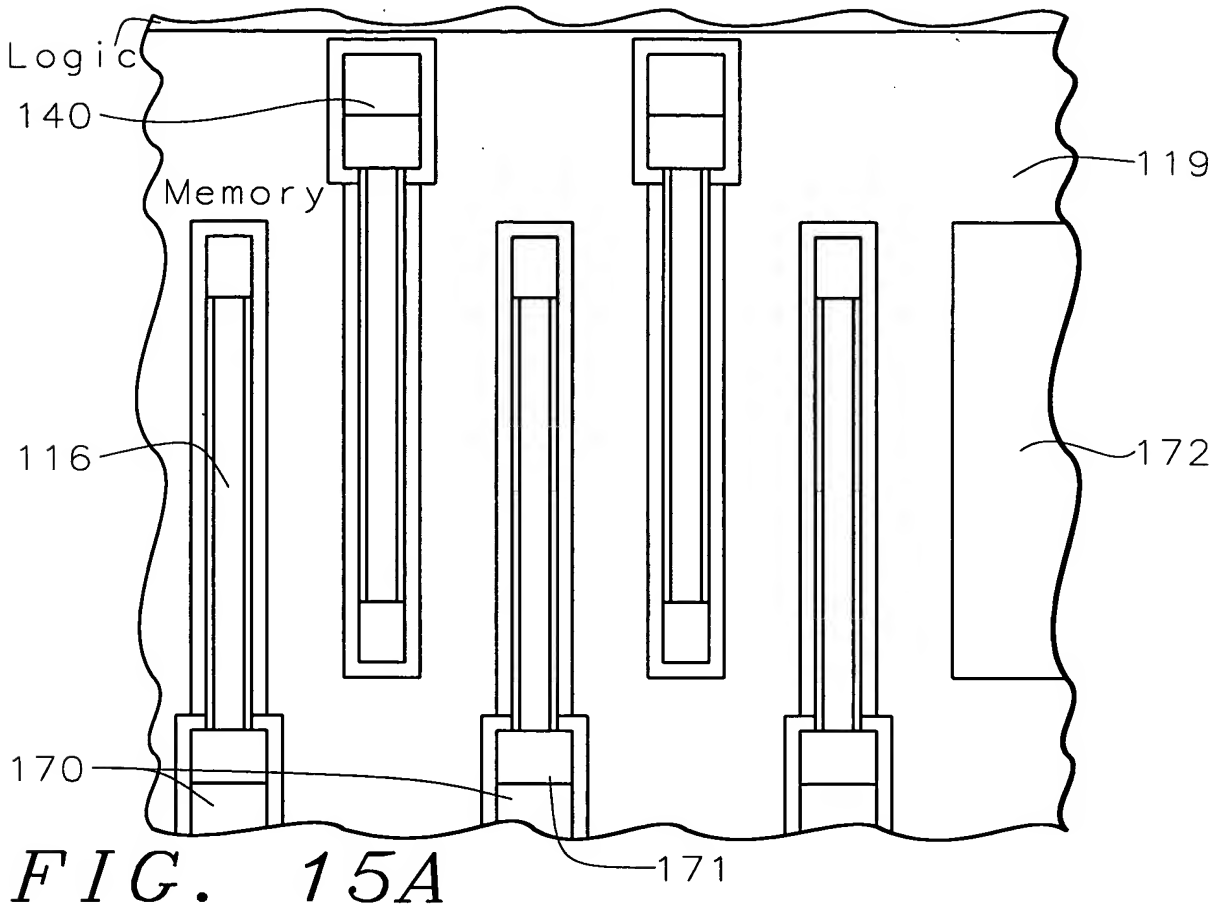

FIG. 15A

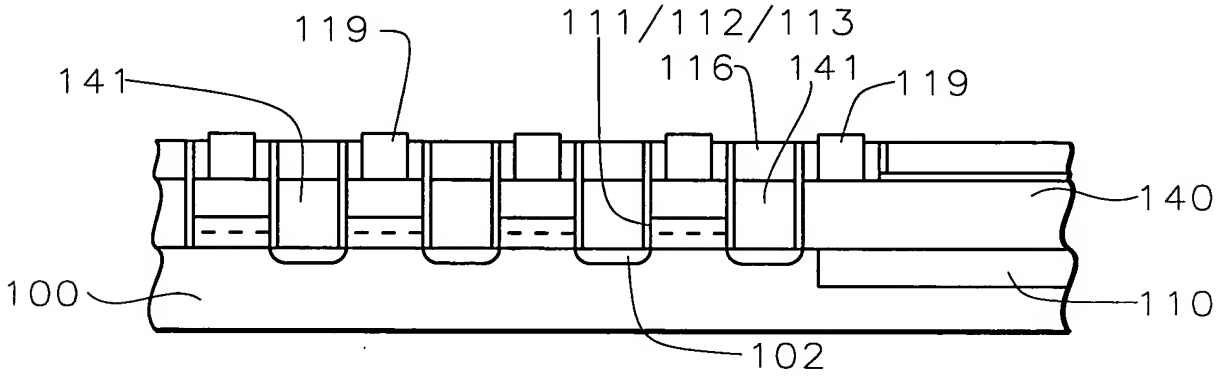

FIG. 15B

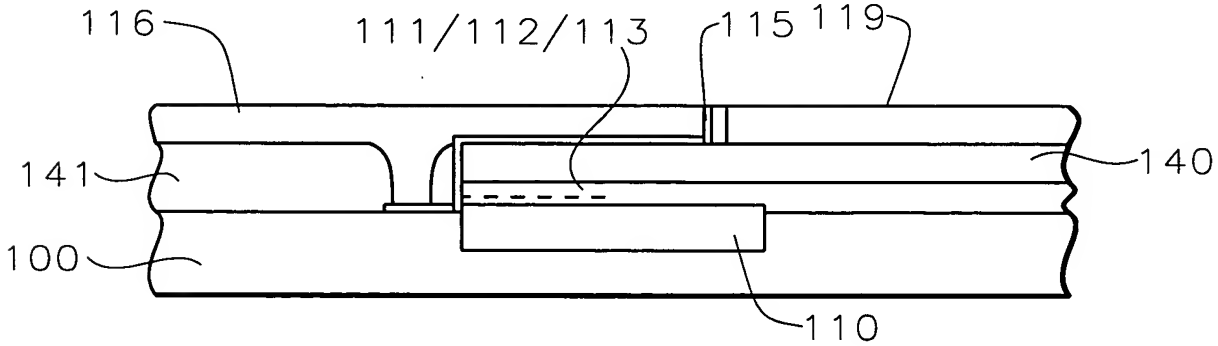

FIG. 15C

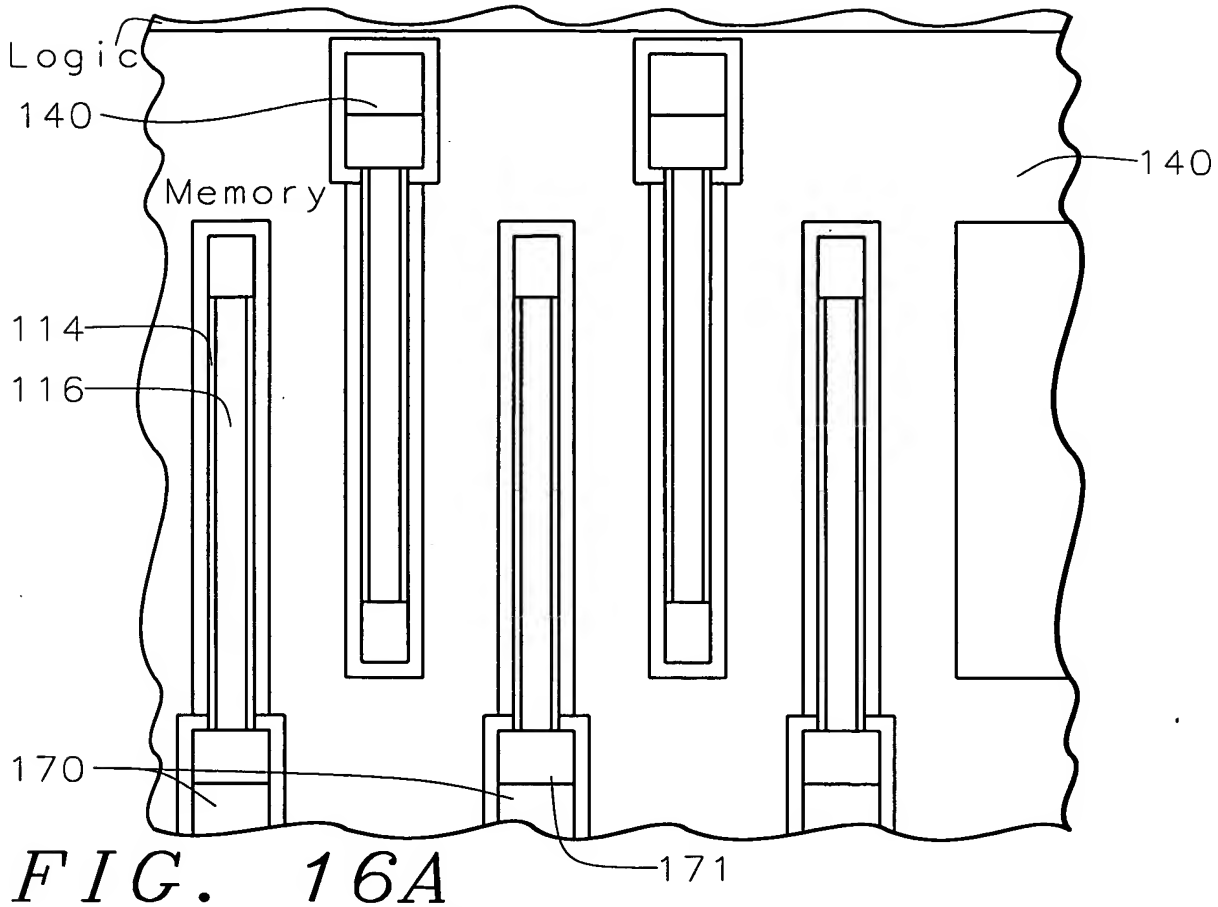

FIG. 16A

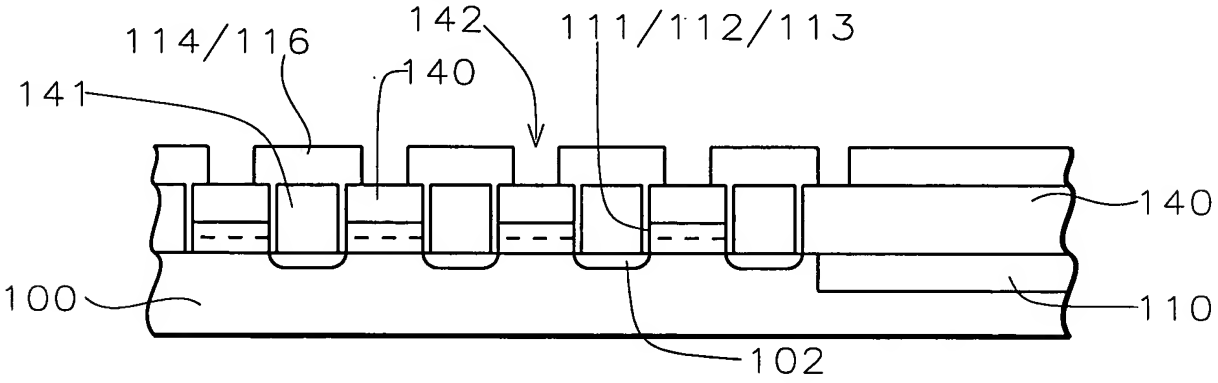

FIG. 16B

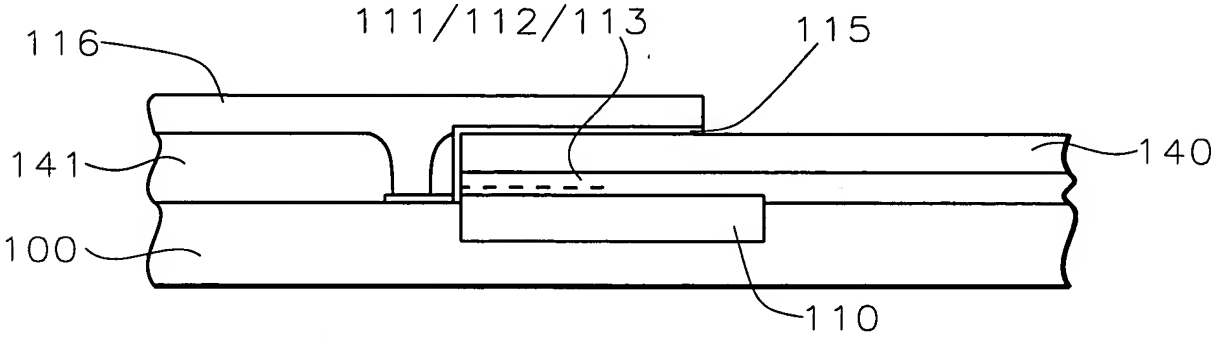

FIG. 16C

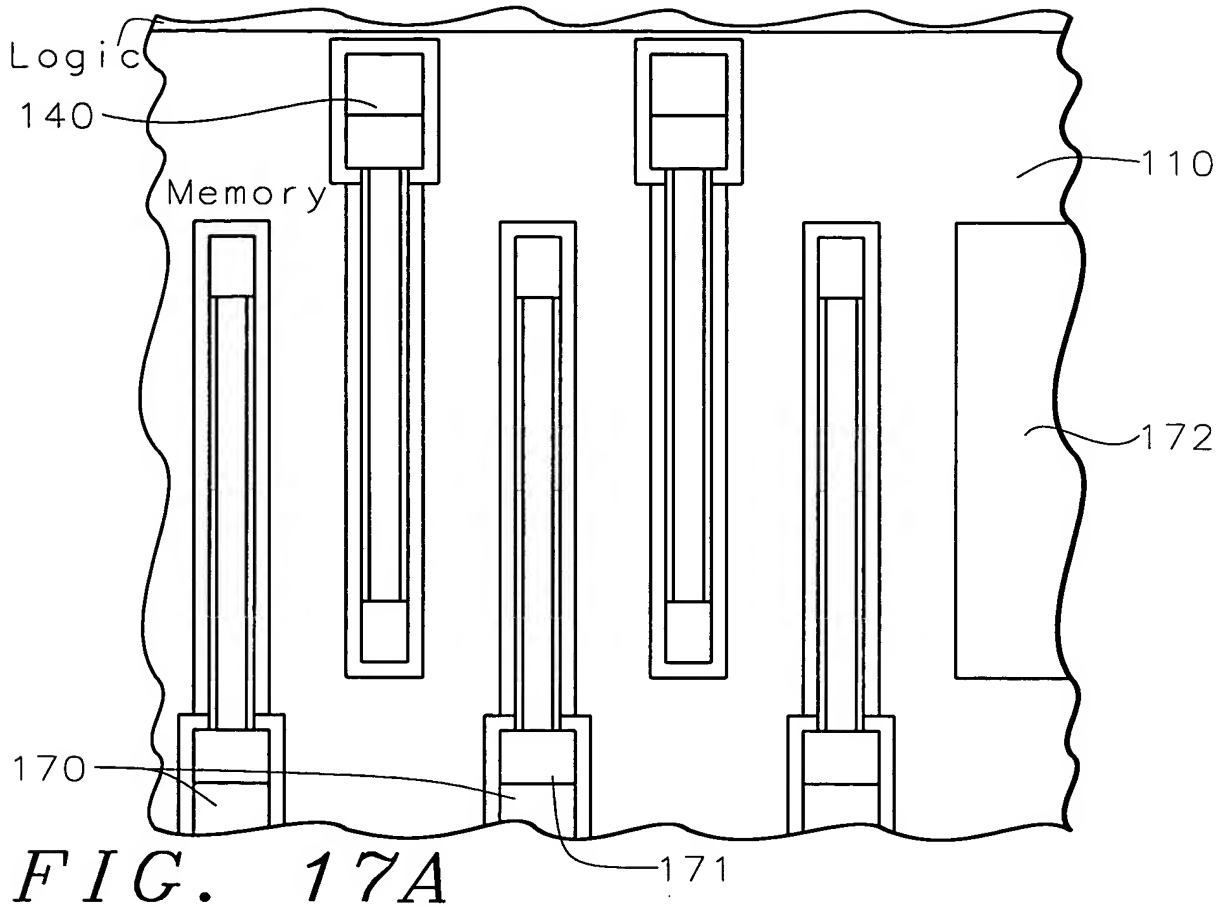

FIG. 17A

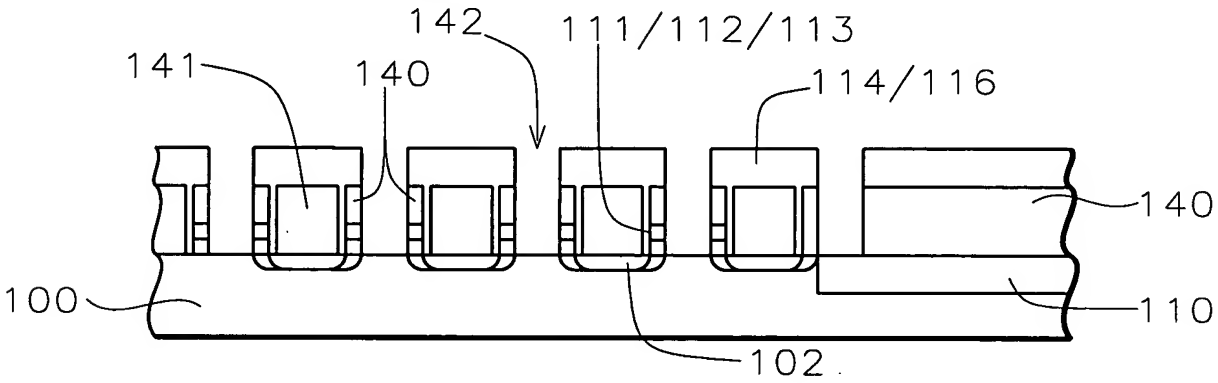

FIG. 17B

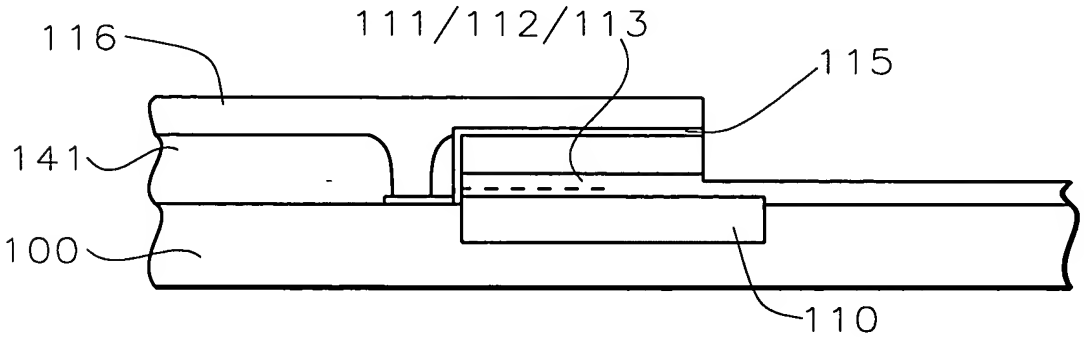

FIG. 17C

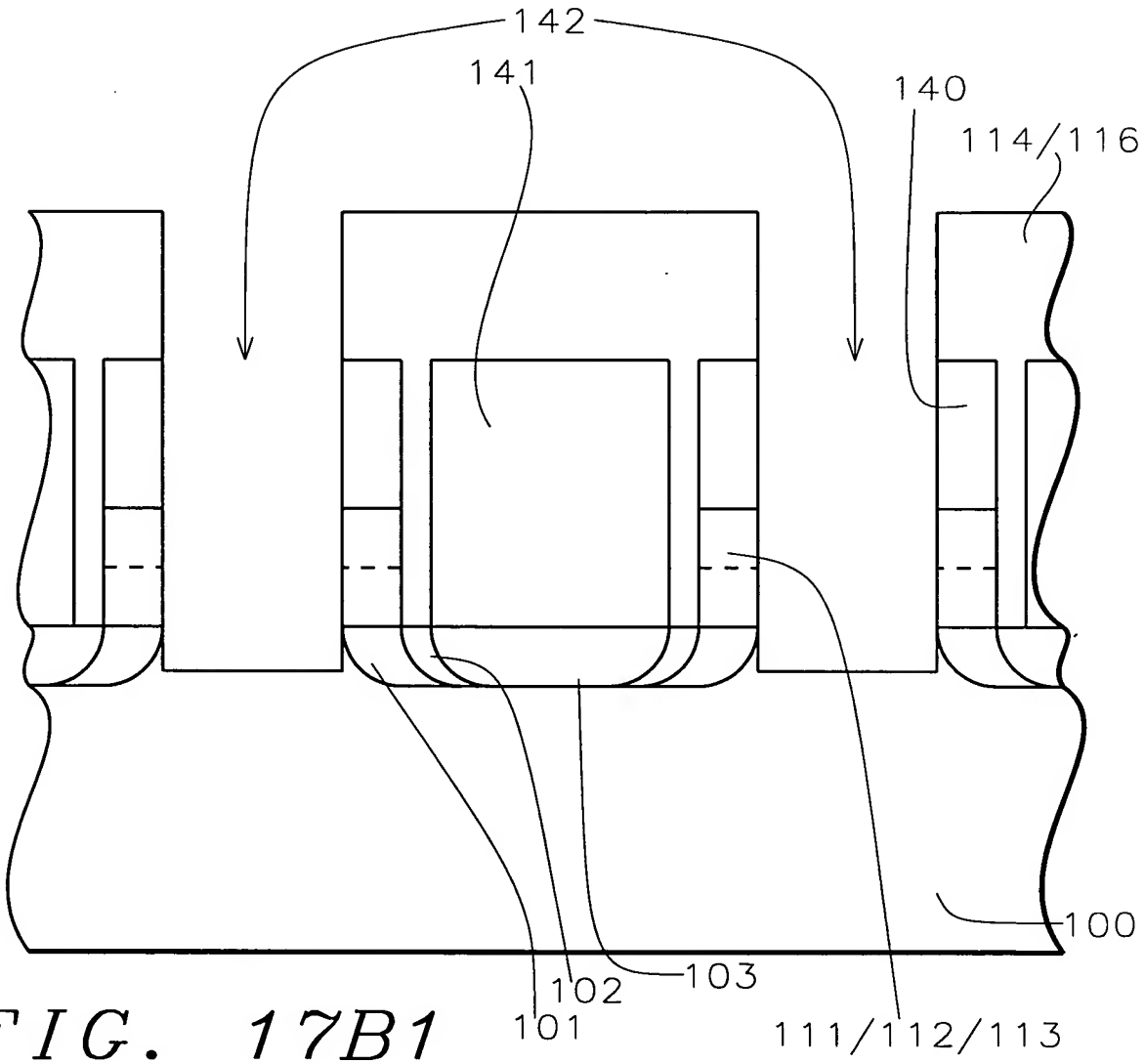

FIG. 17B1

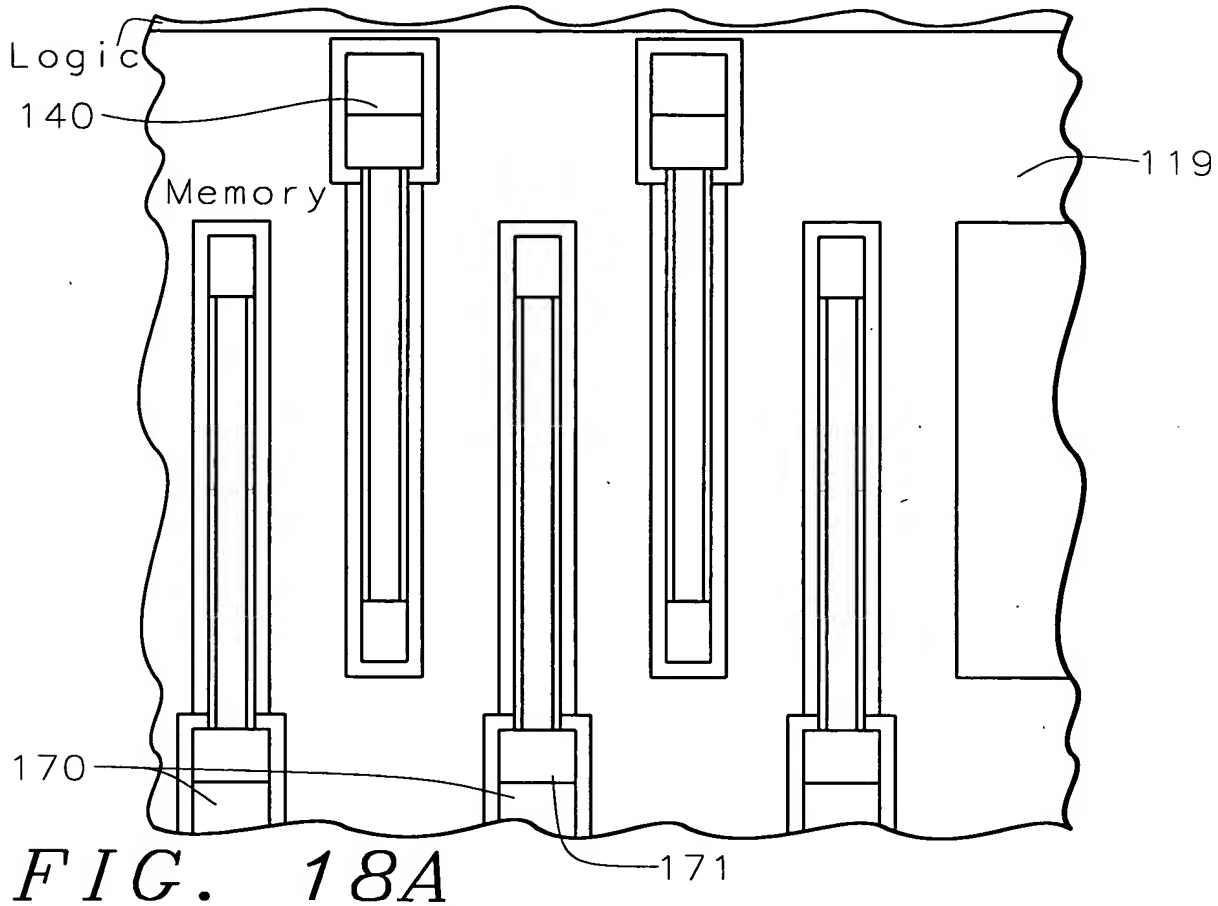

FIG. 18A

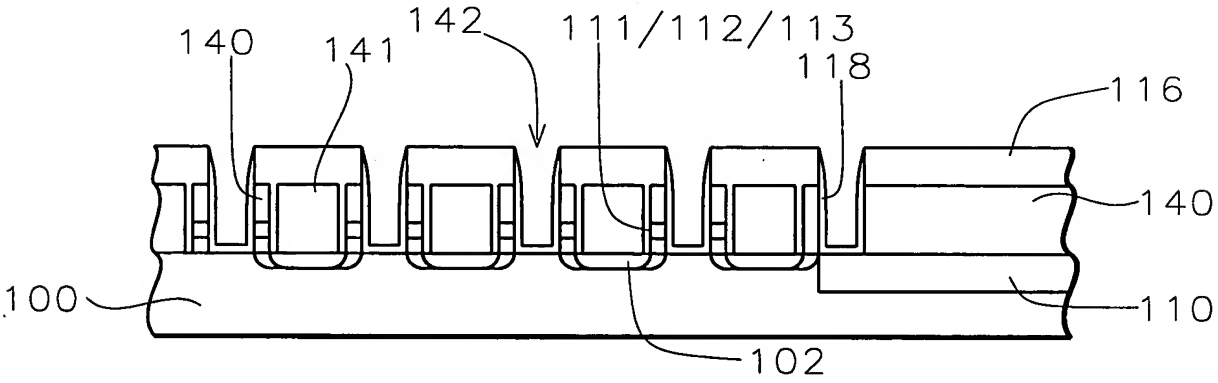

FIG. 18B

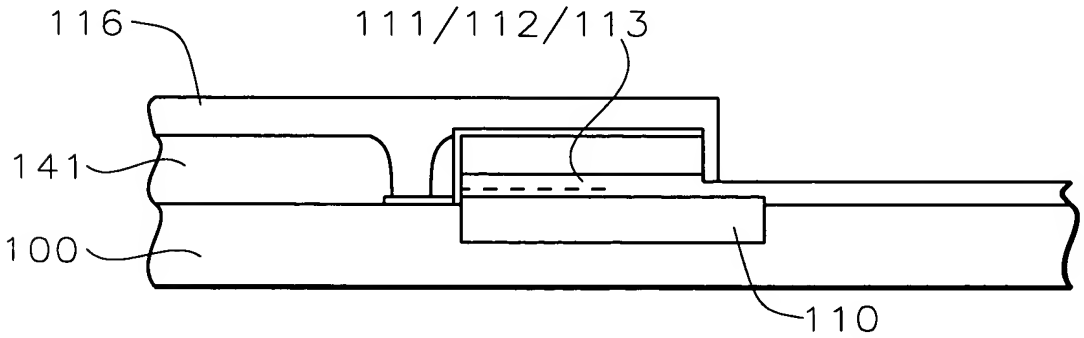

FIG. 18C

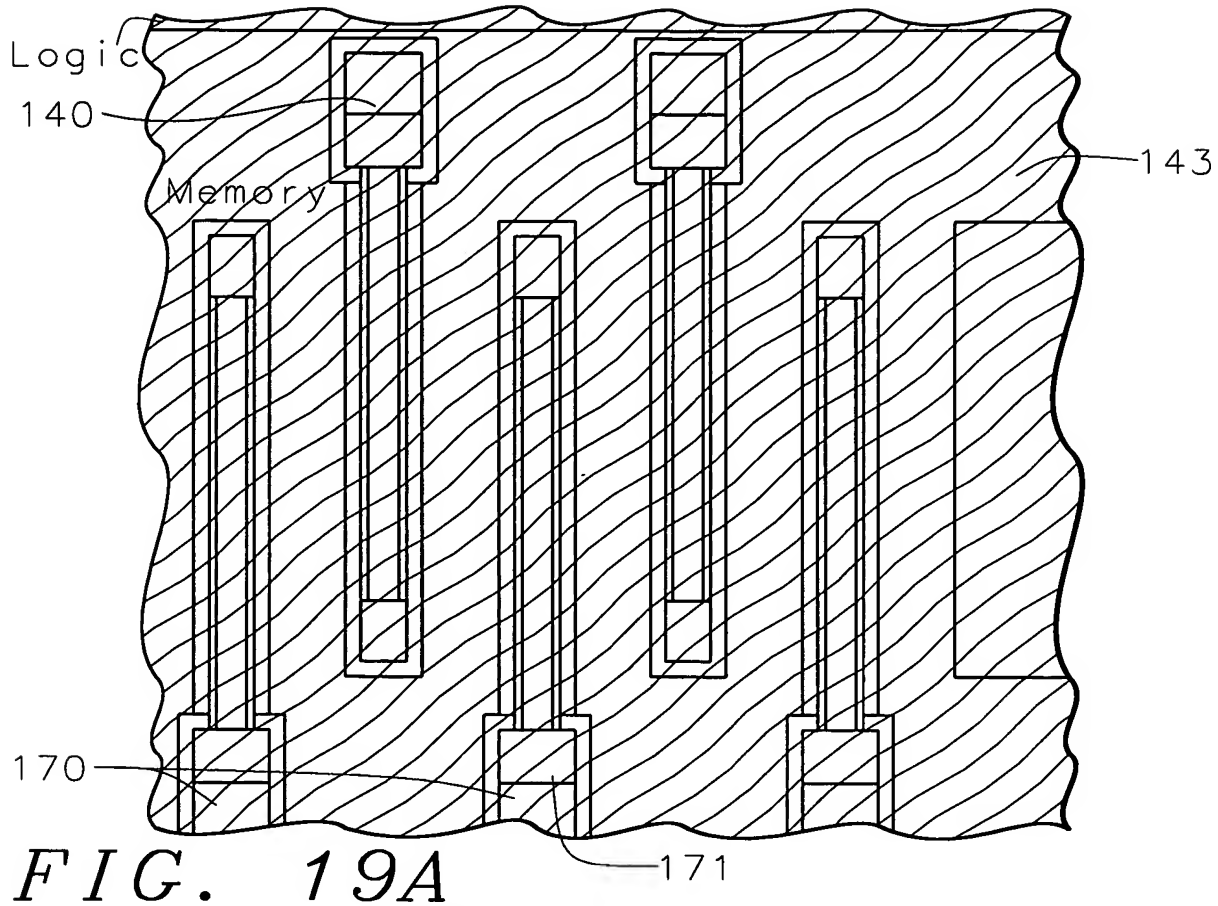

FIG. 19A

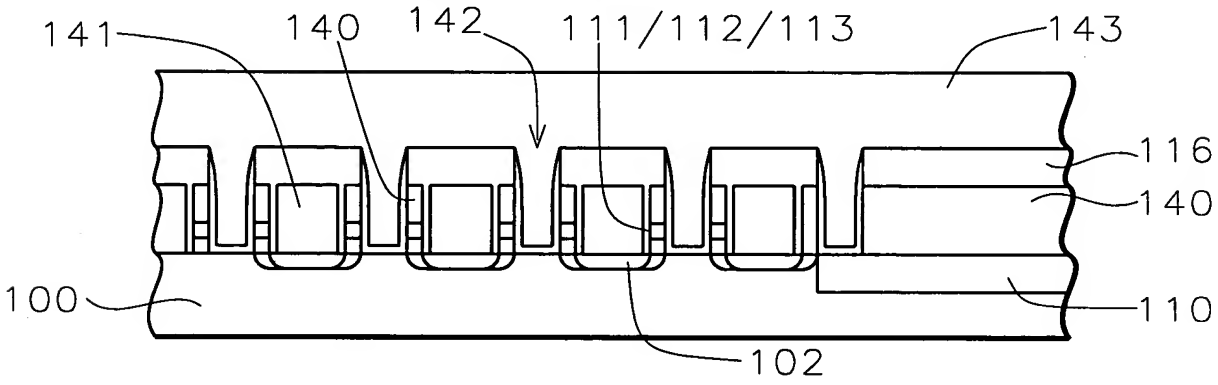

FIG. 19B

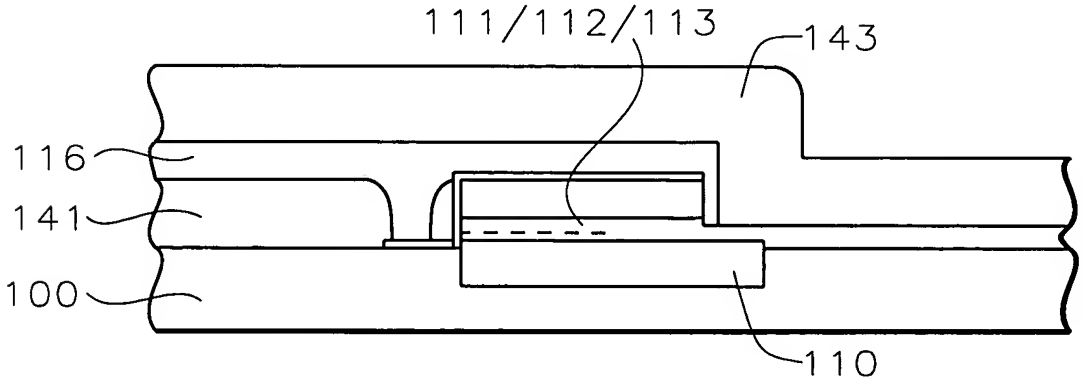

FIG. 19C

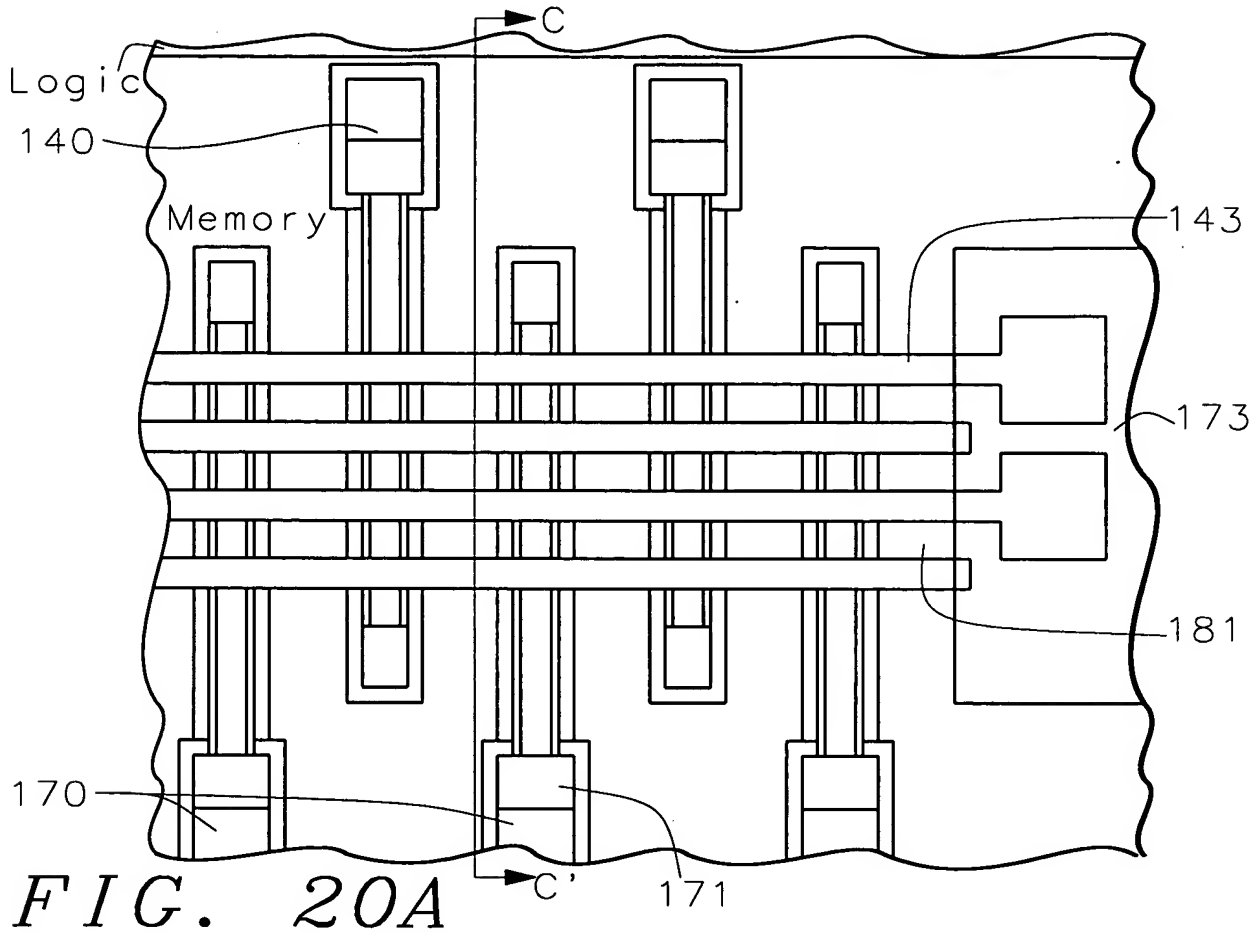

FIG. 20A

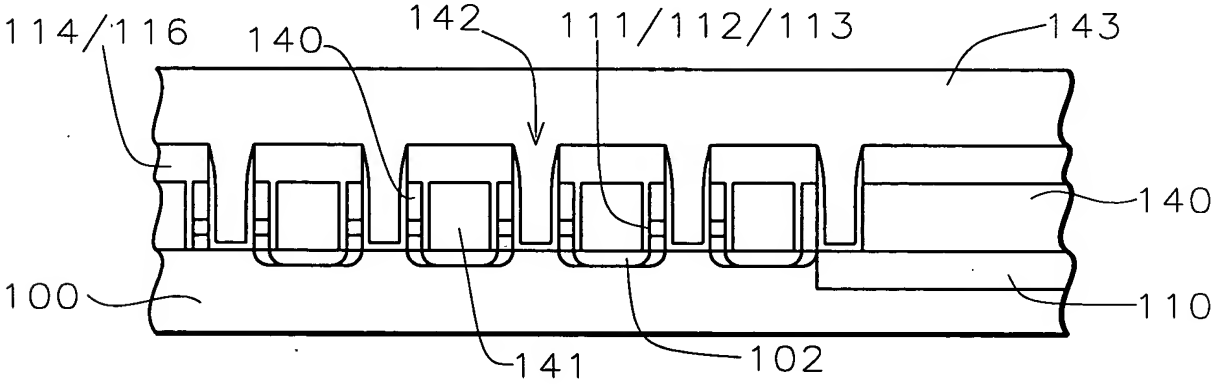

FIG. 20B

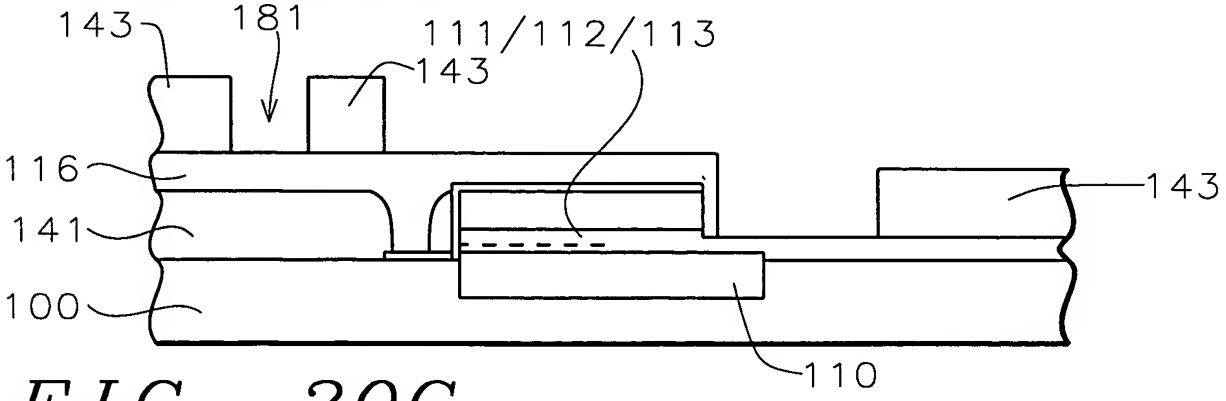

FIG. 20C

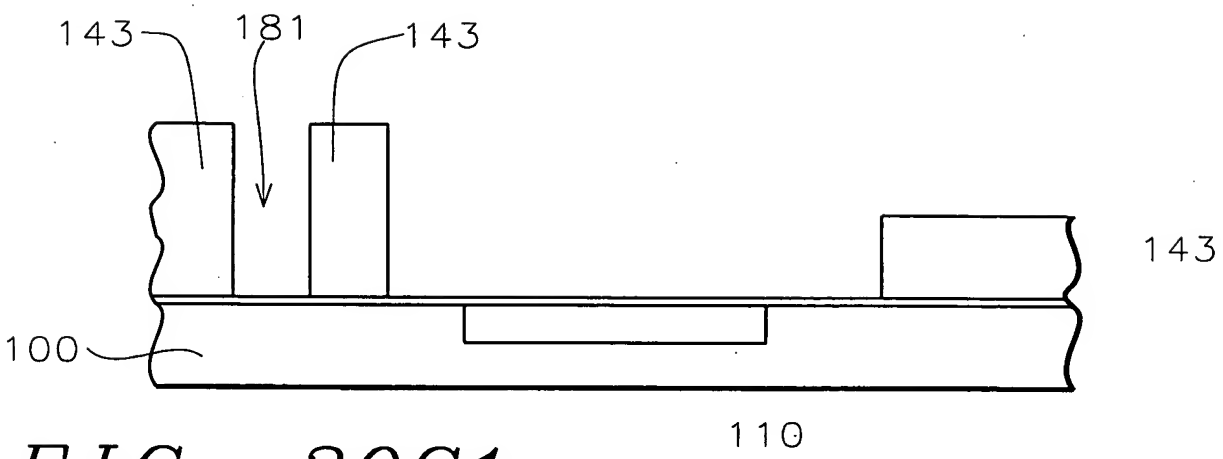

FIG. 20C1

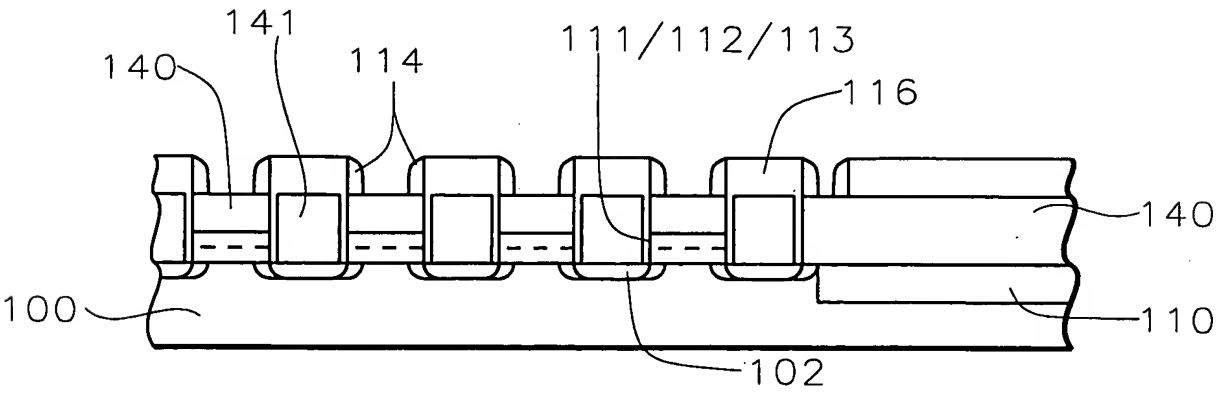

FIG. 21

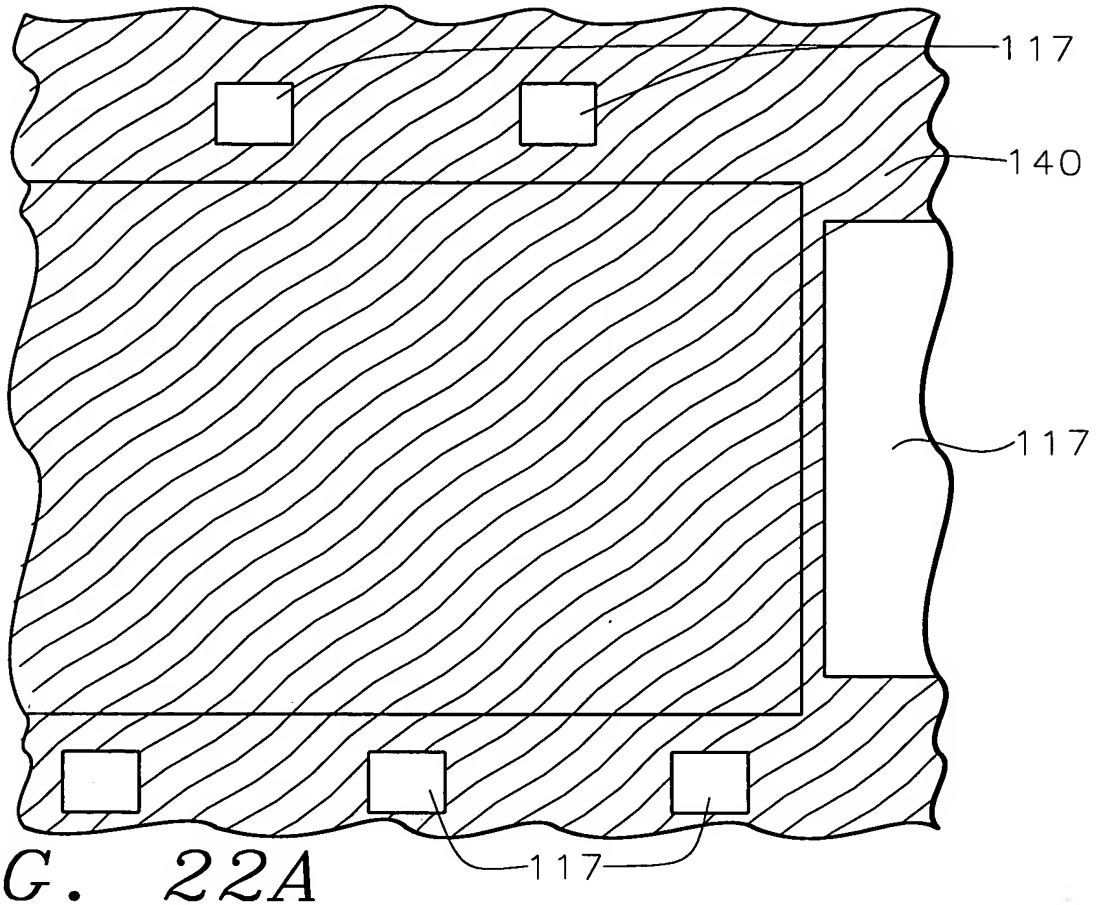

FIG. 22A

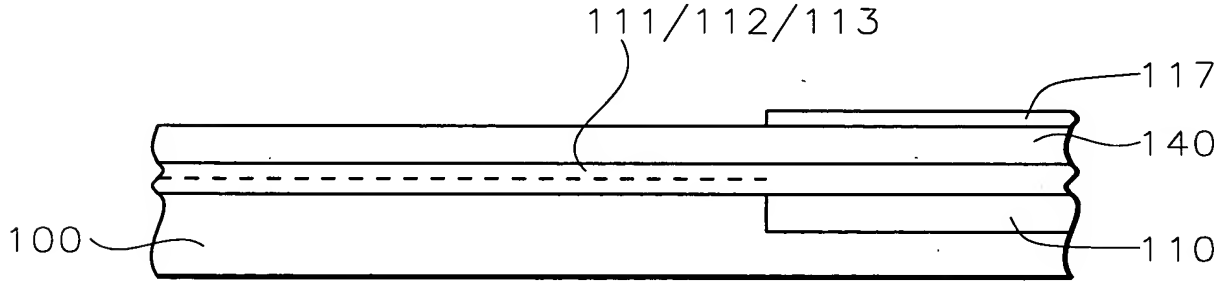

FIG. 22B

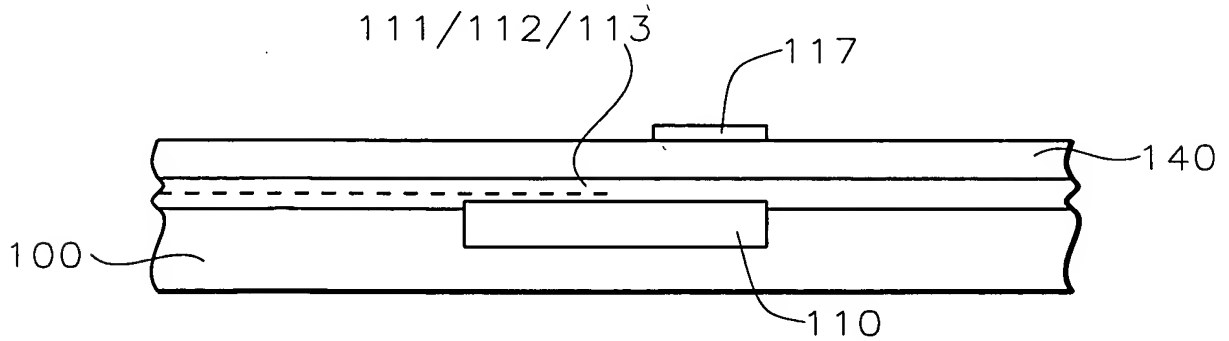

FIG. 22C

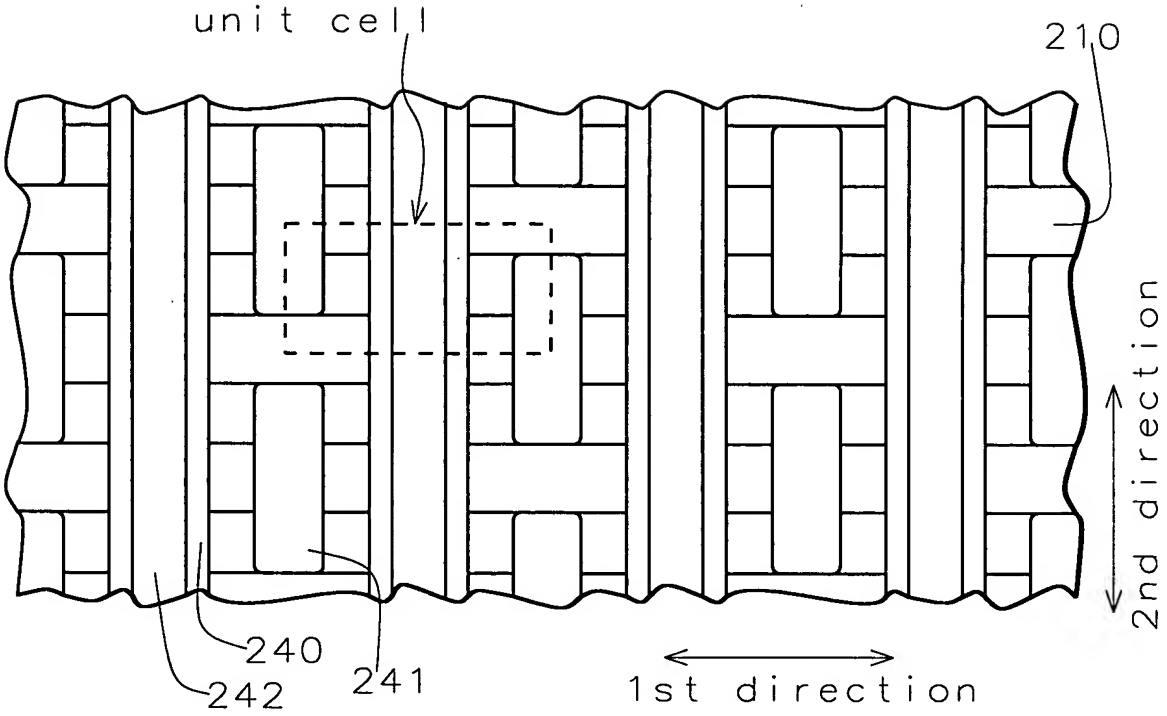

FIG. 23A

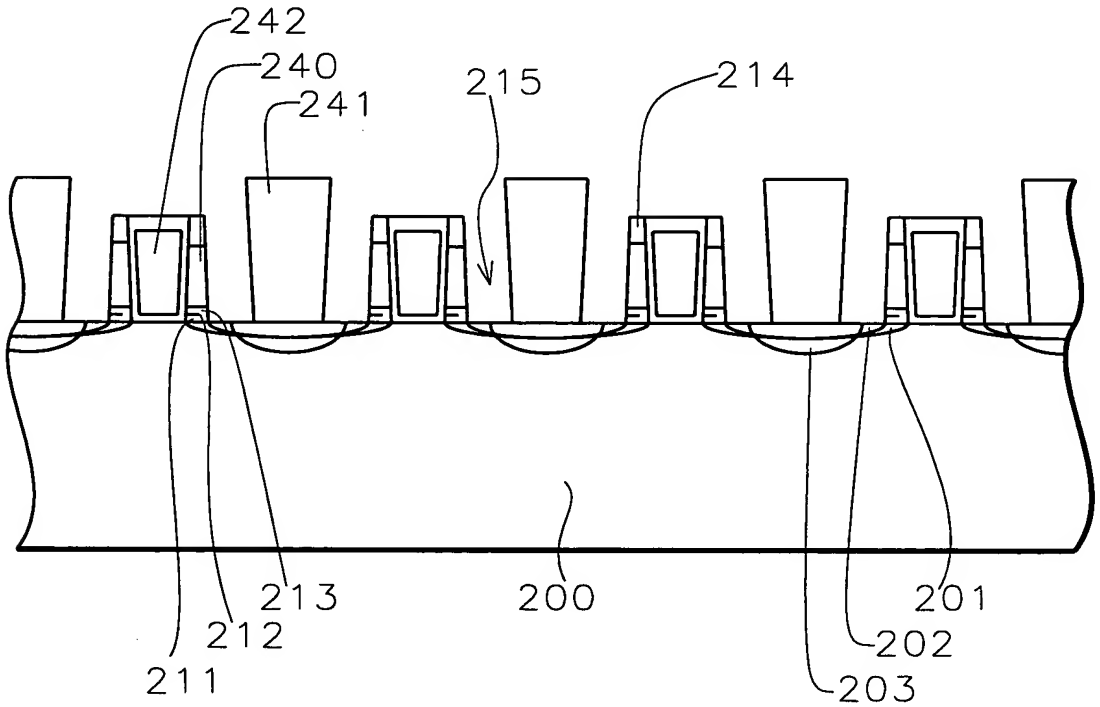

FIG. 23B

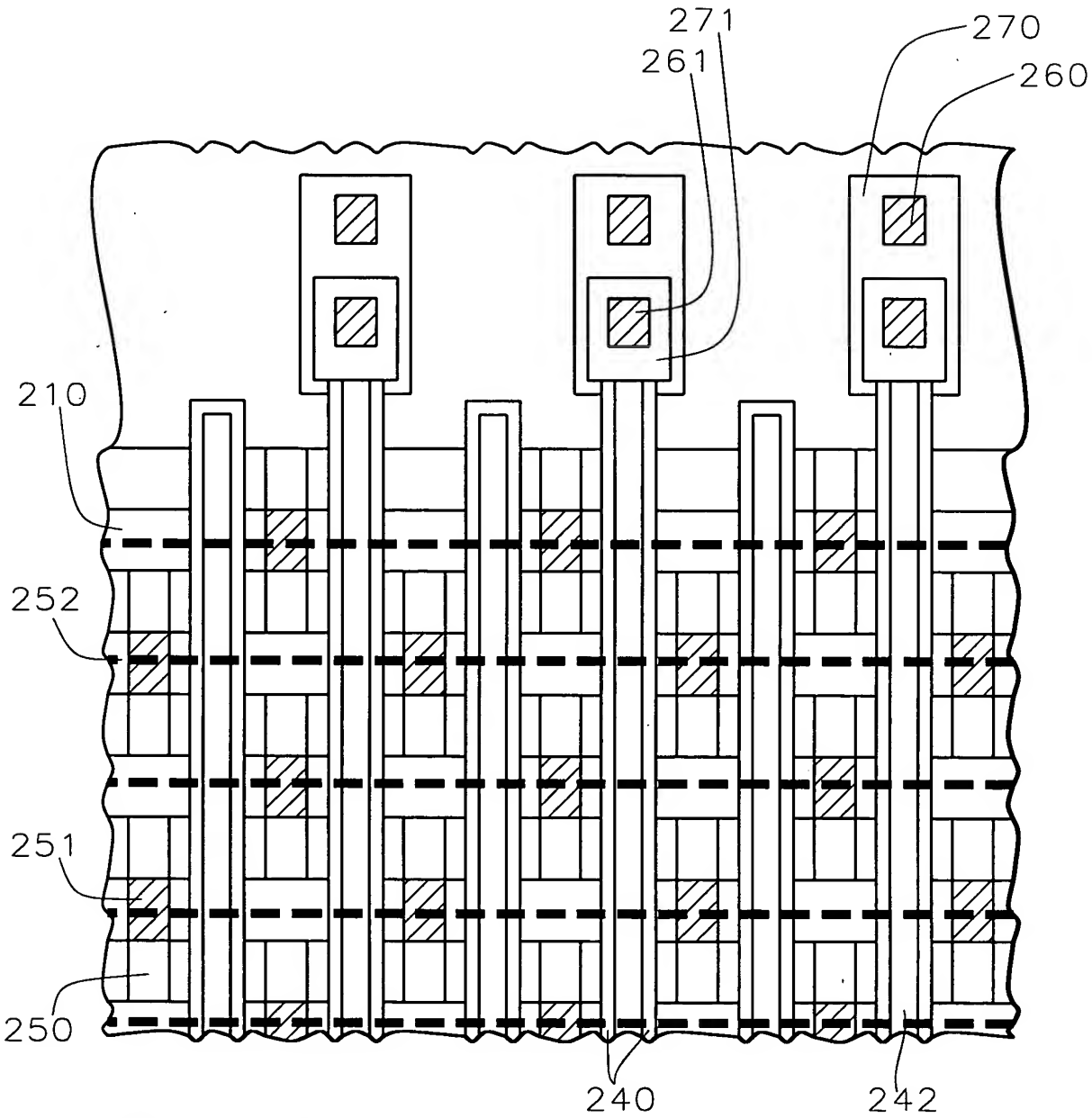

FIG. 24

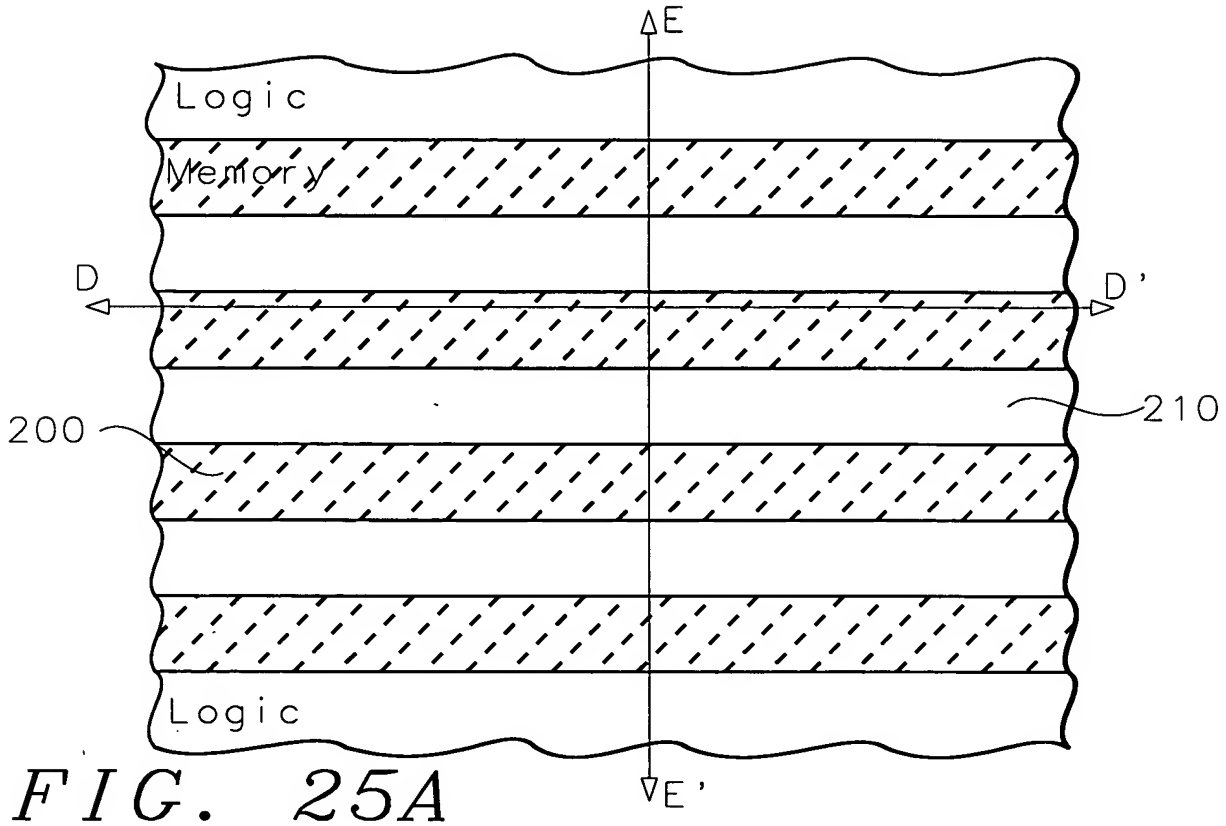

FIG. 25A

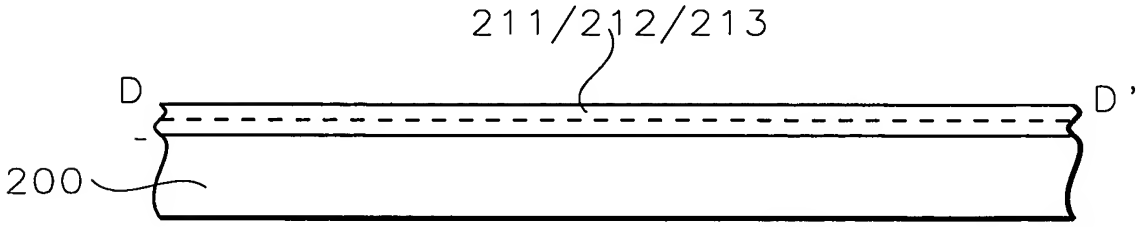

FIG. 25B

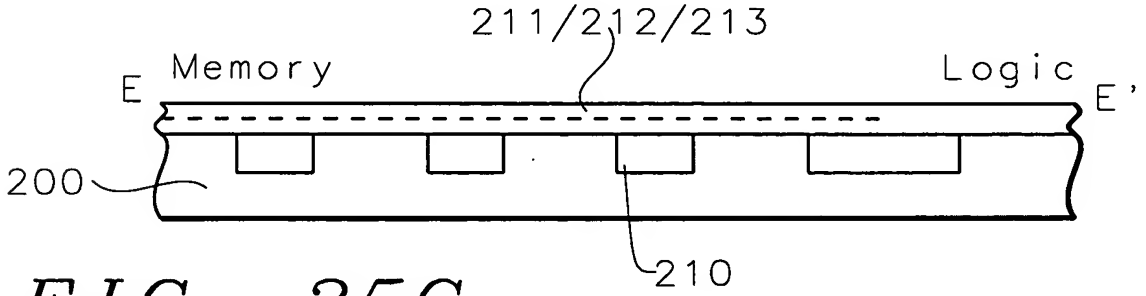

FIG. 25C

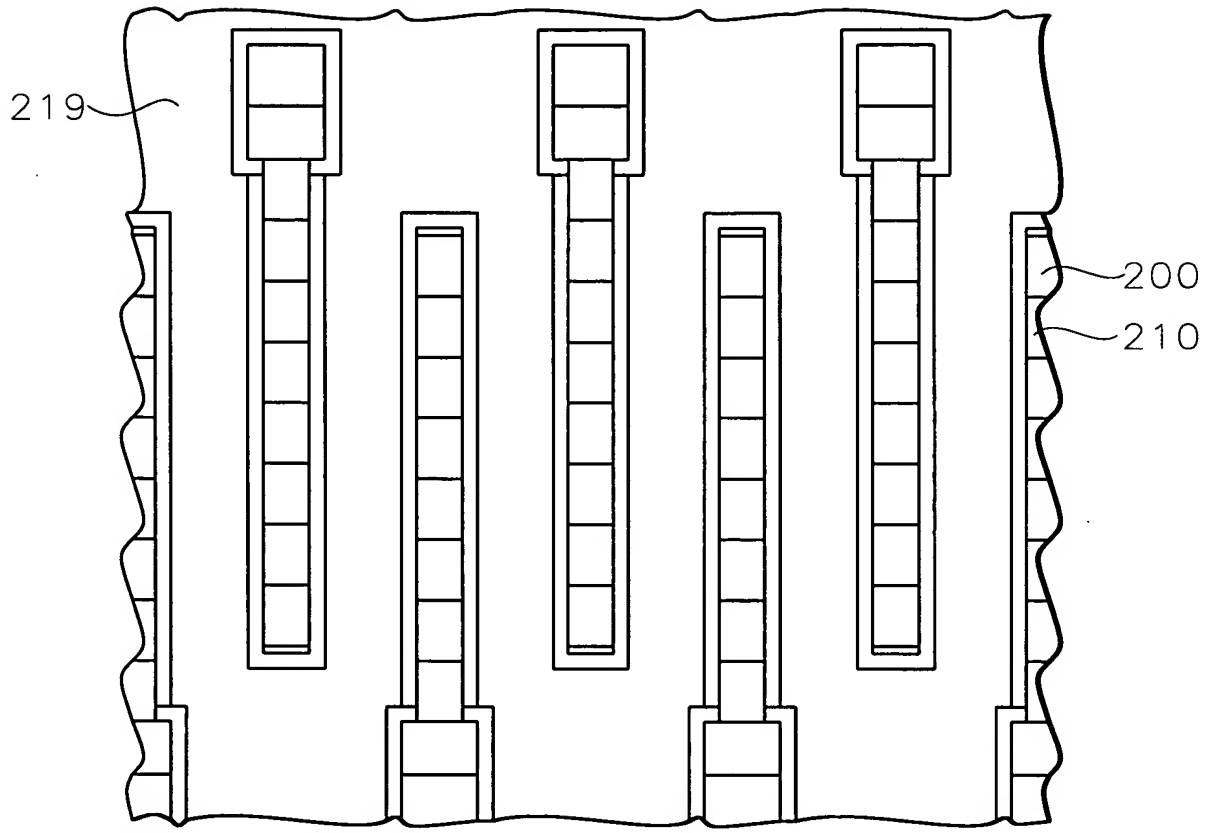

FIG. 26A

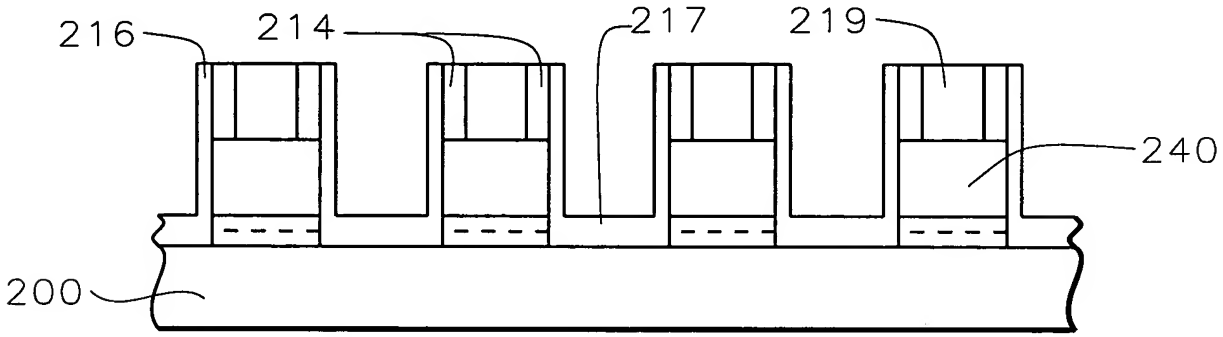

FIG. 26B

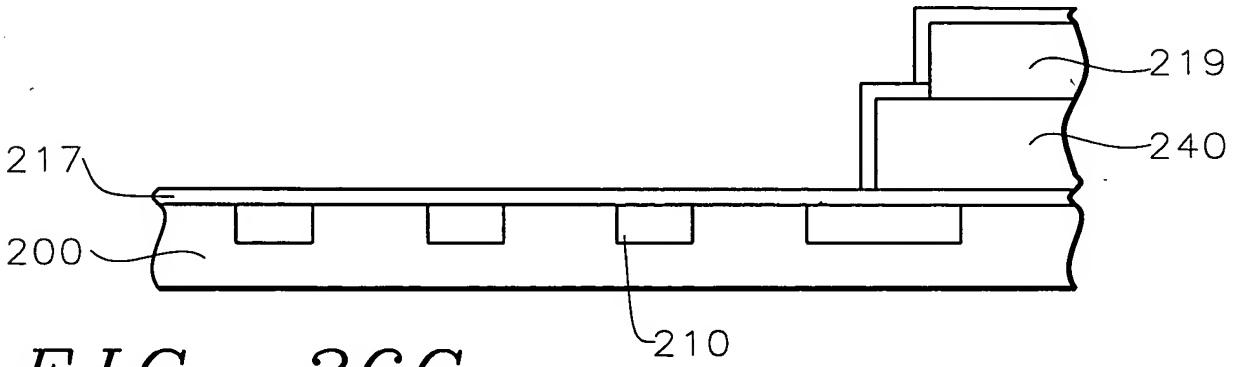

FIG. 26C

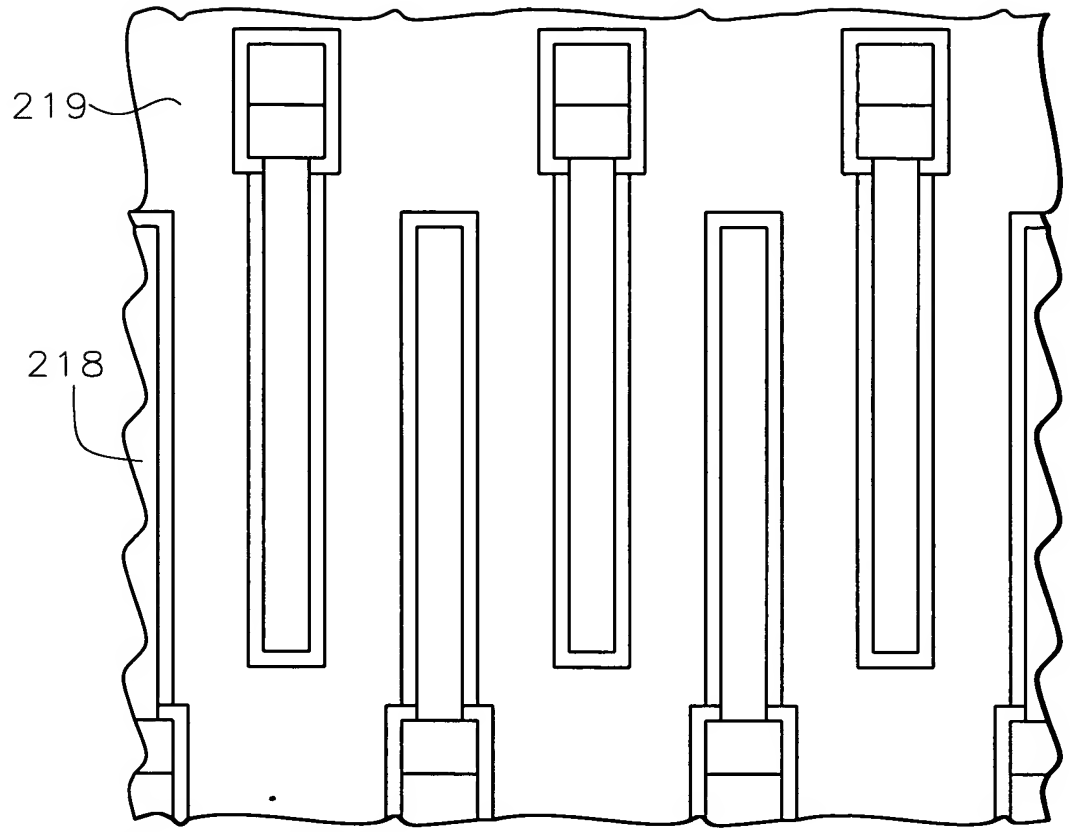

FIG. 27A

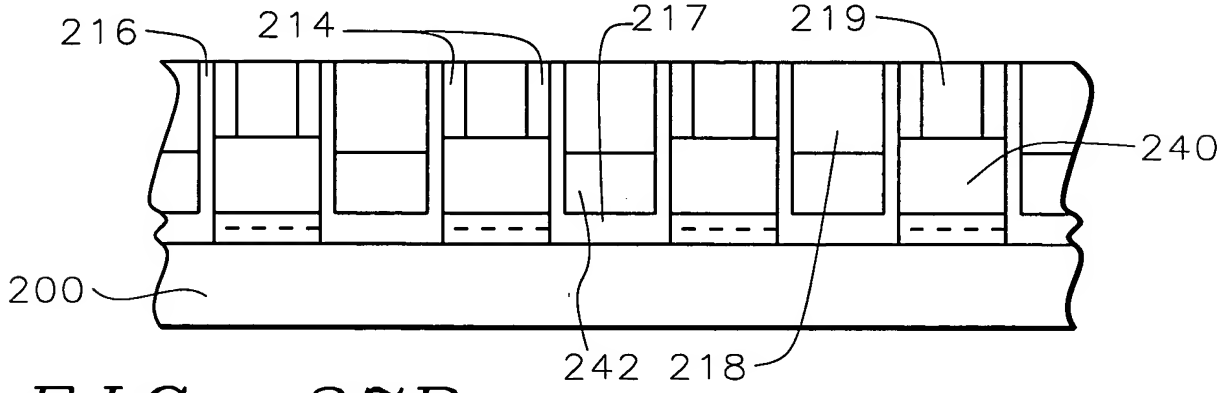

FIG. 27B

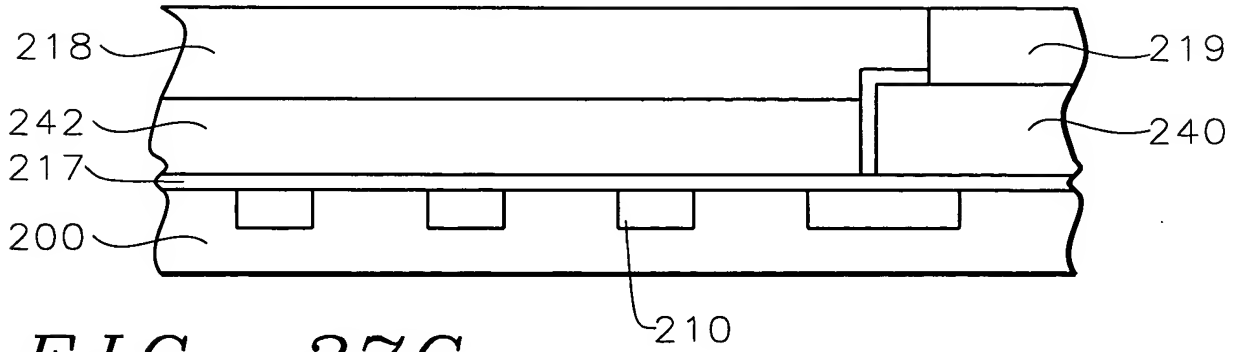

FIG. 27C

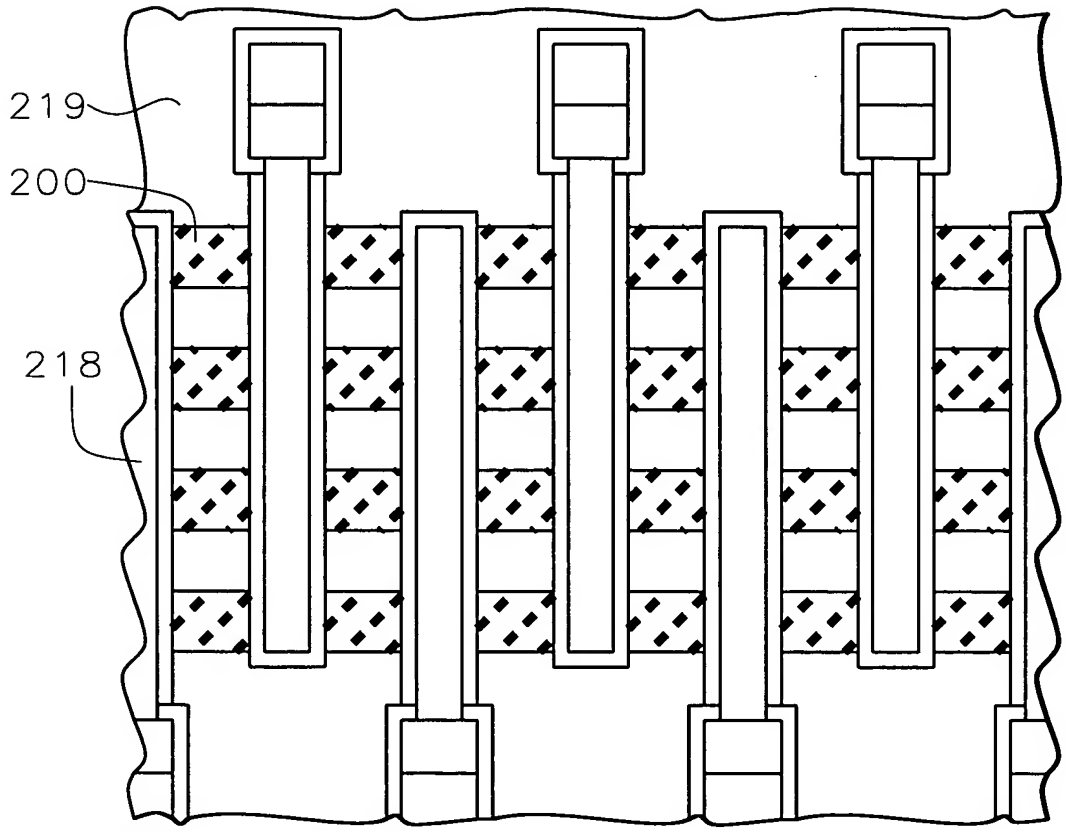

FIG. 28A

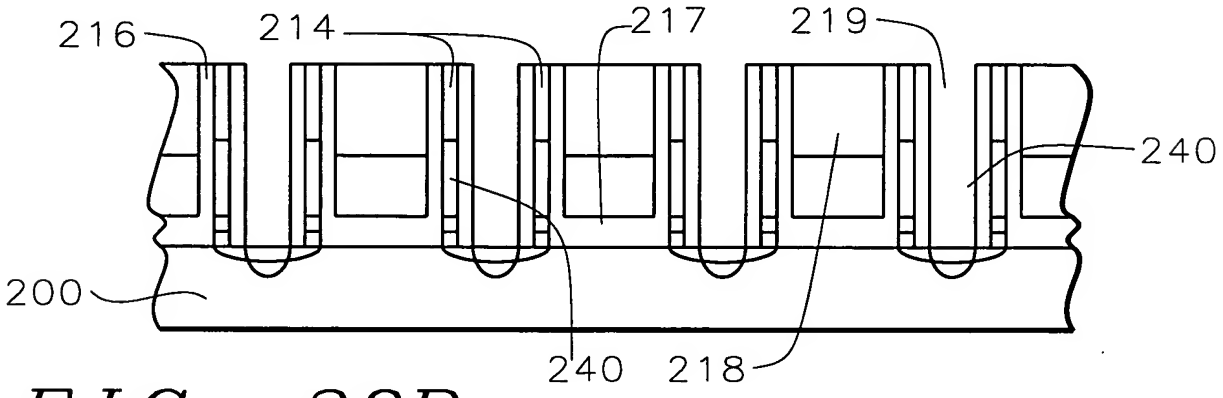

FIG. 28B

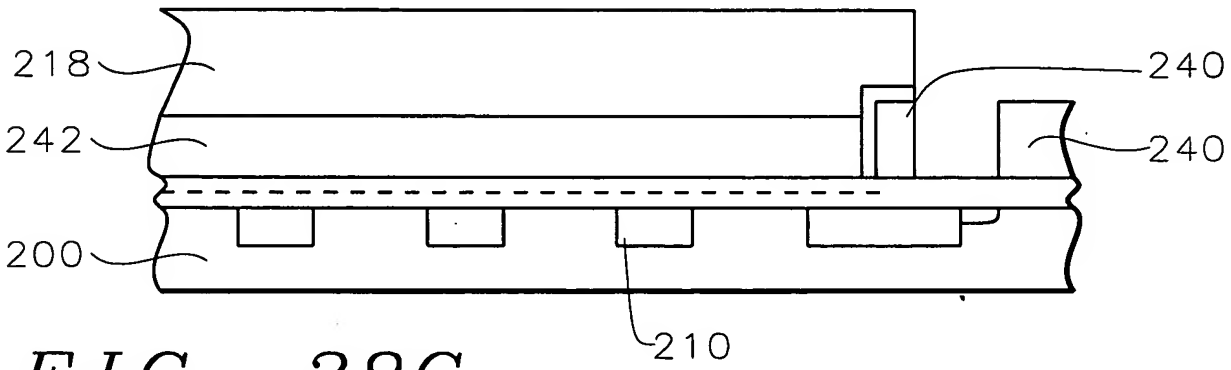

FIG. 28C

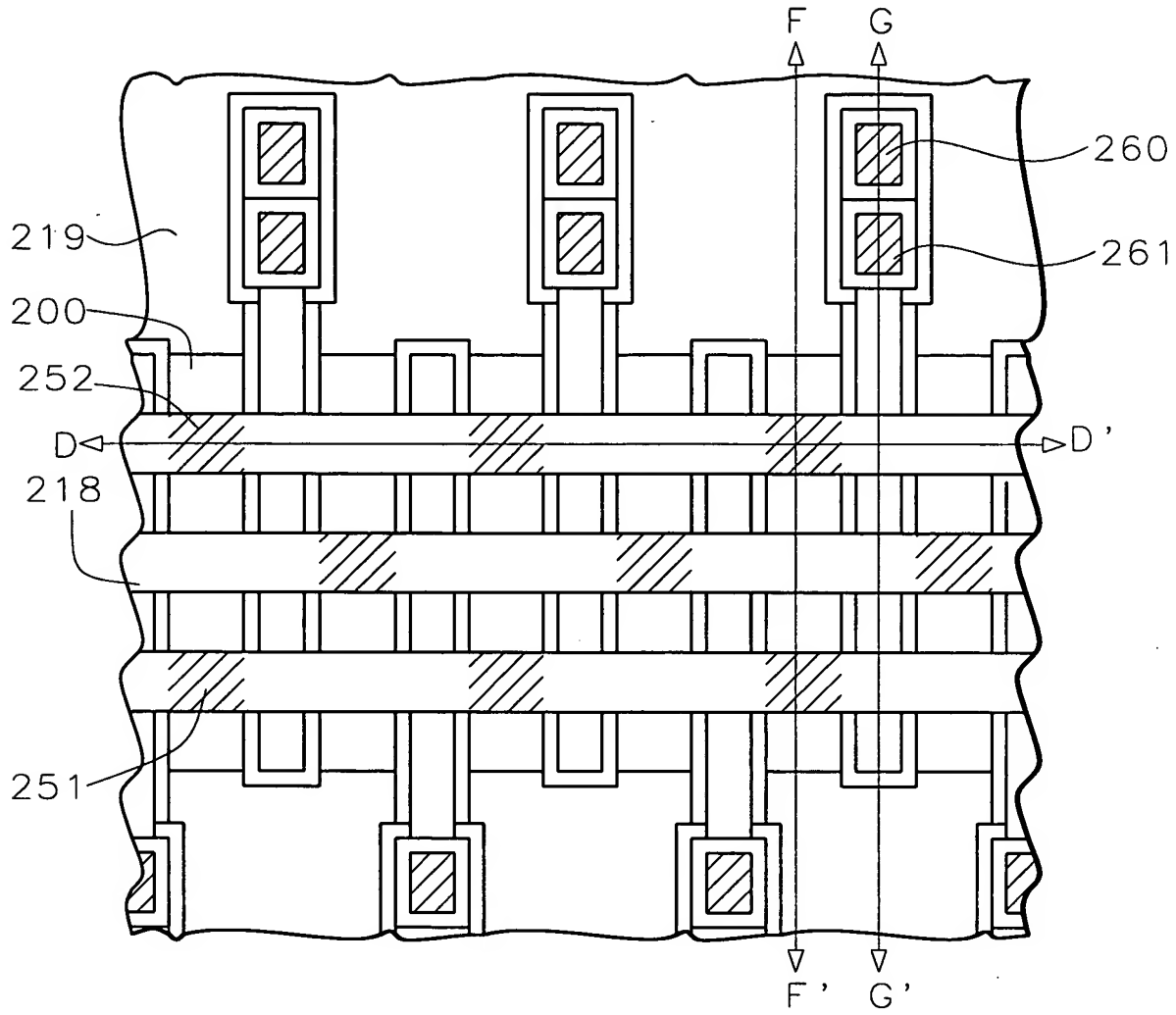

FIG. 29A

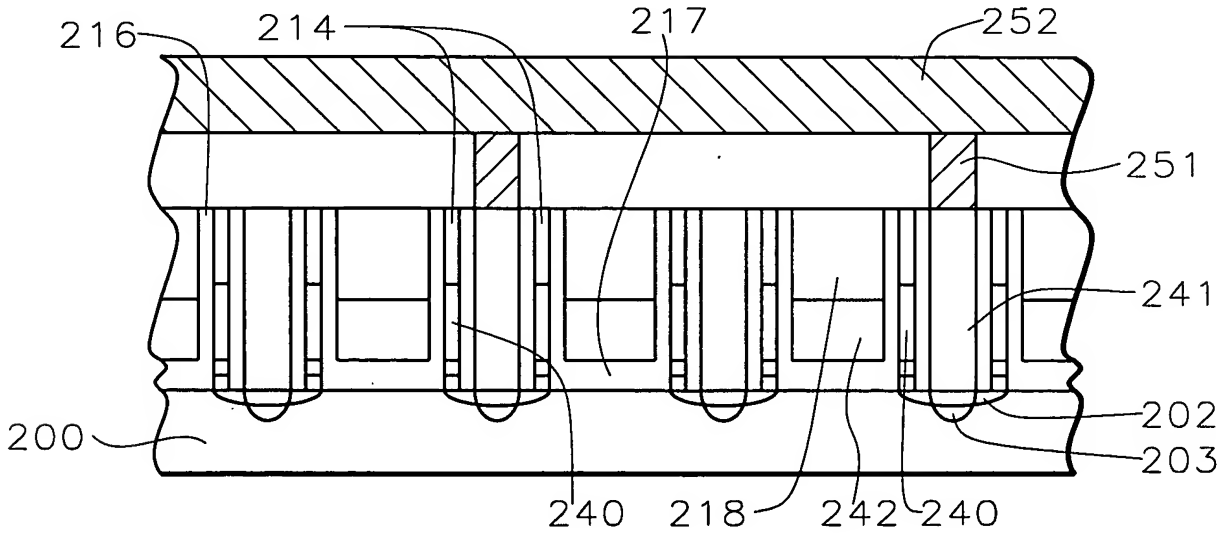

FIG. 29B

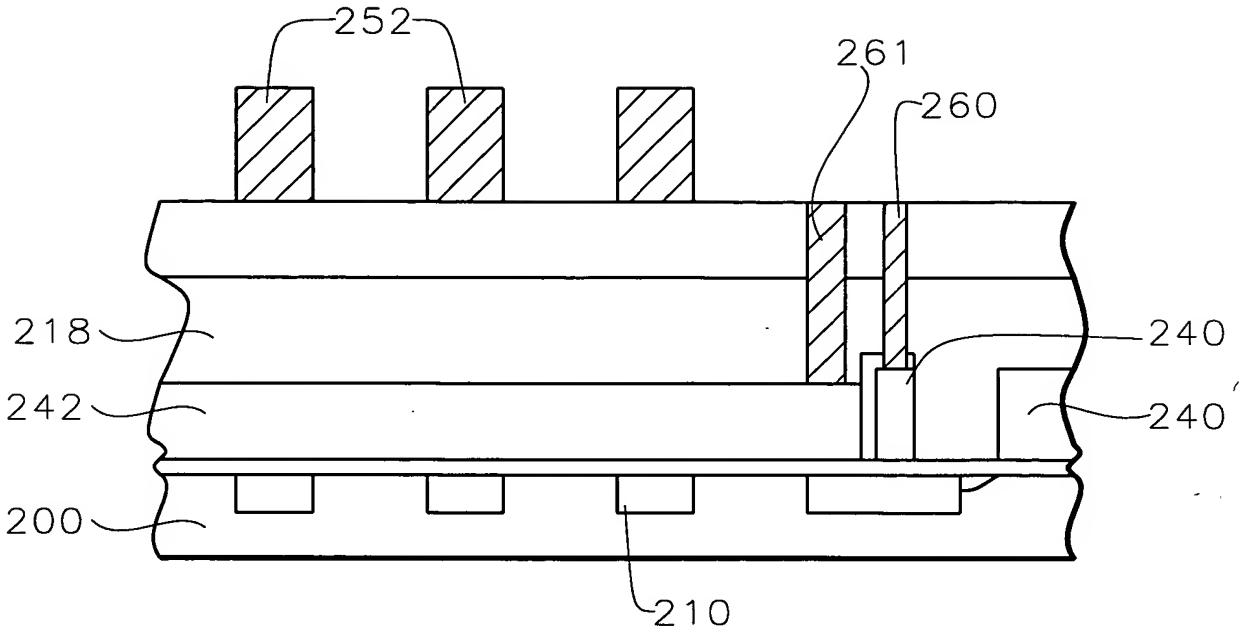

FIG. 29C

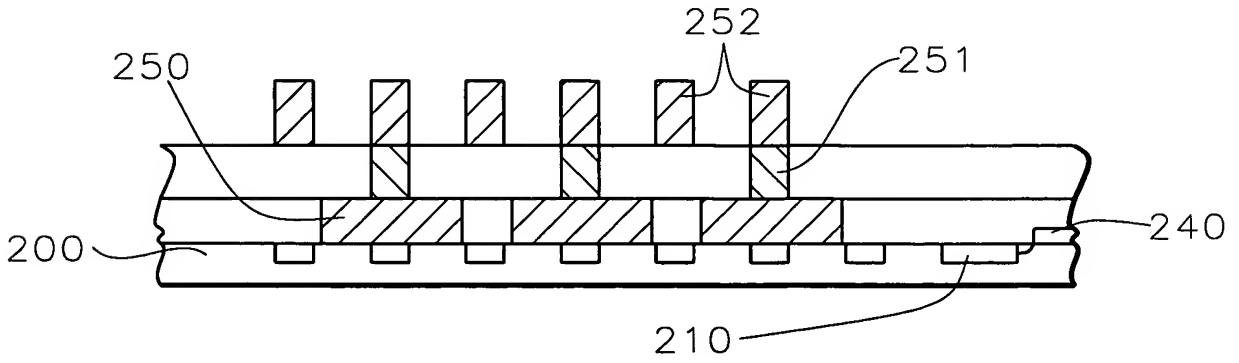

FIG. 29C1

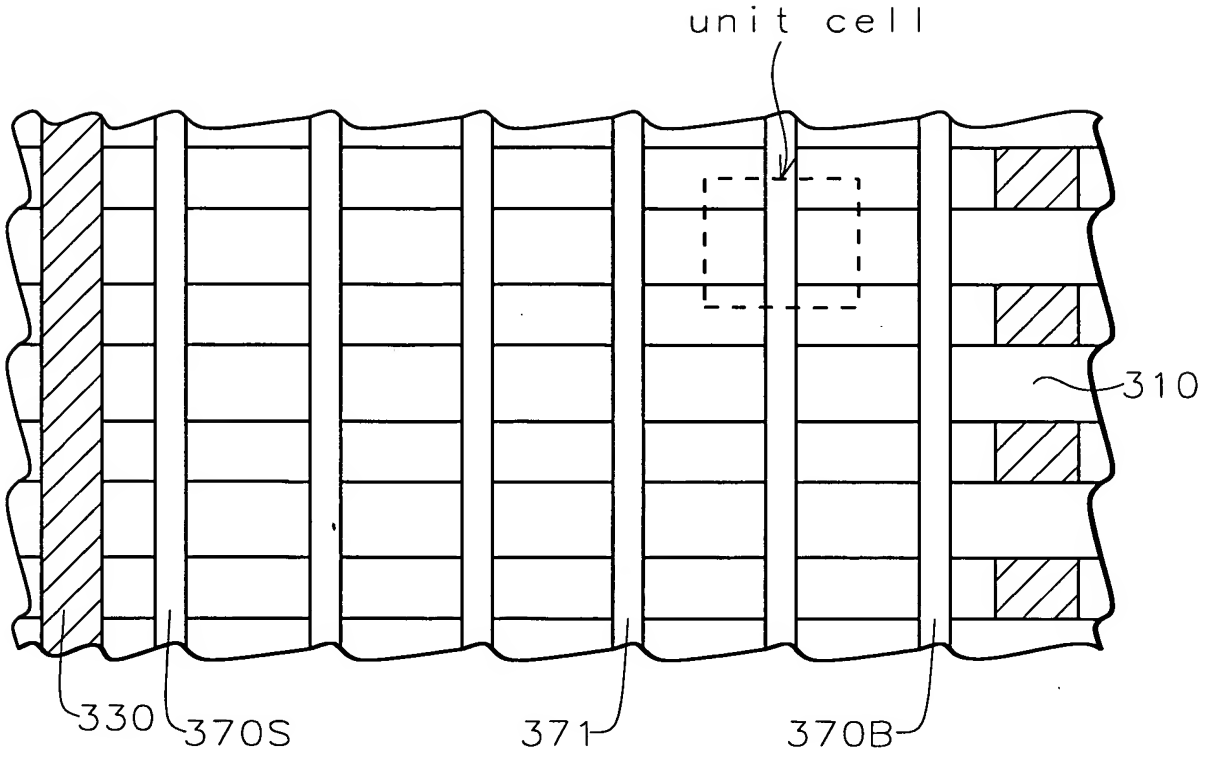
unit cell
310
330
370S
371
370B

FIG. 30

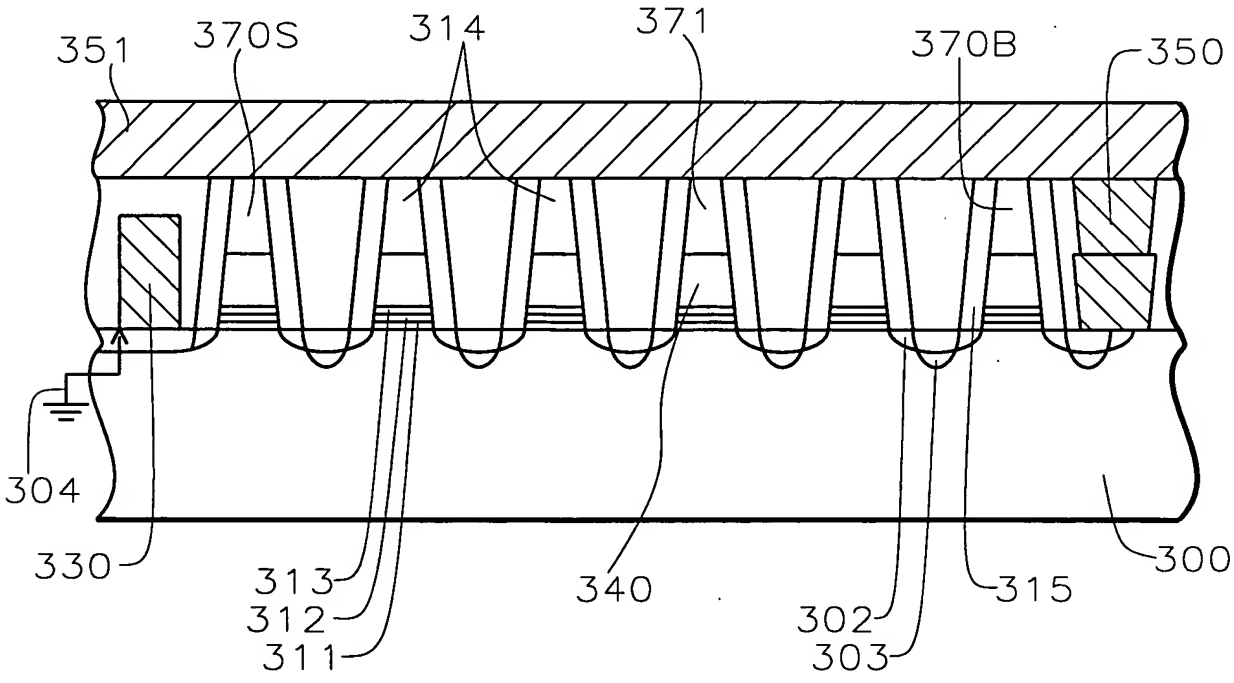
351
370S
314
371
370B
350
304
330
313
312
311
340
302
303
315
300

FIG. 31

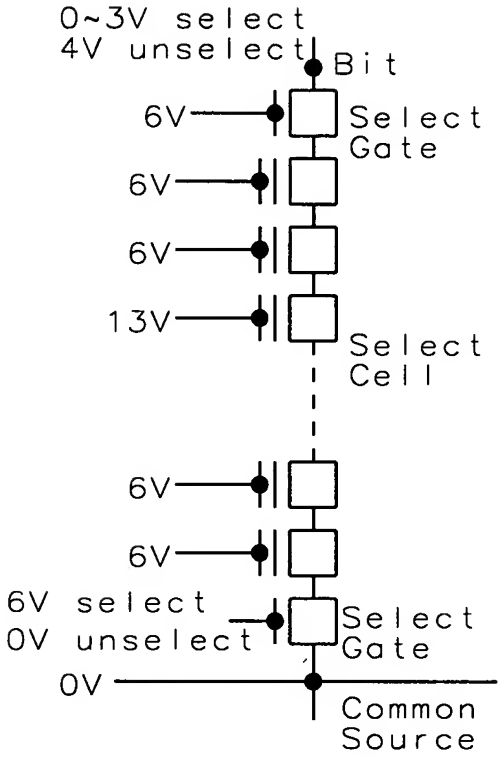

FIG. 32A1

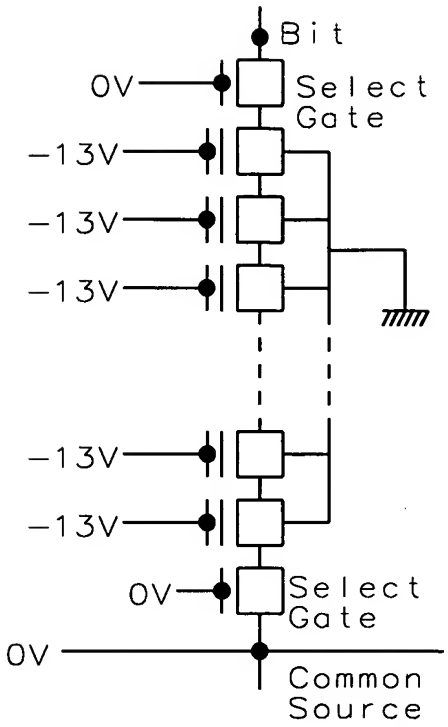

FIG. 32A2

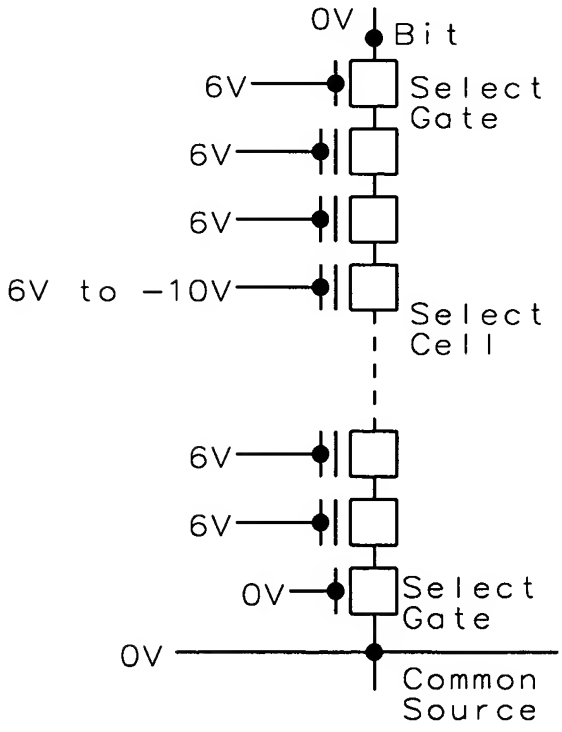

FIG. 32B1

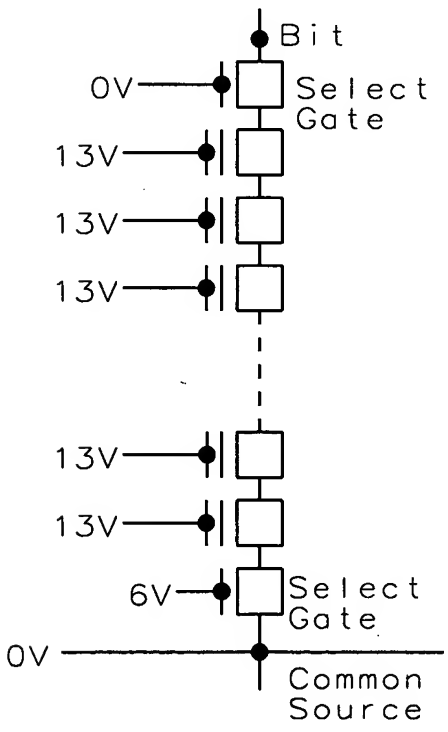

FIG. 32B2

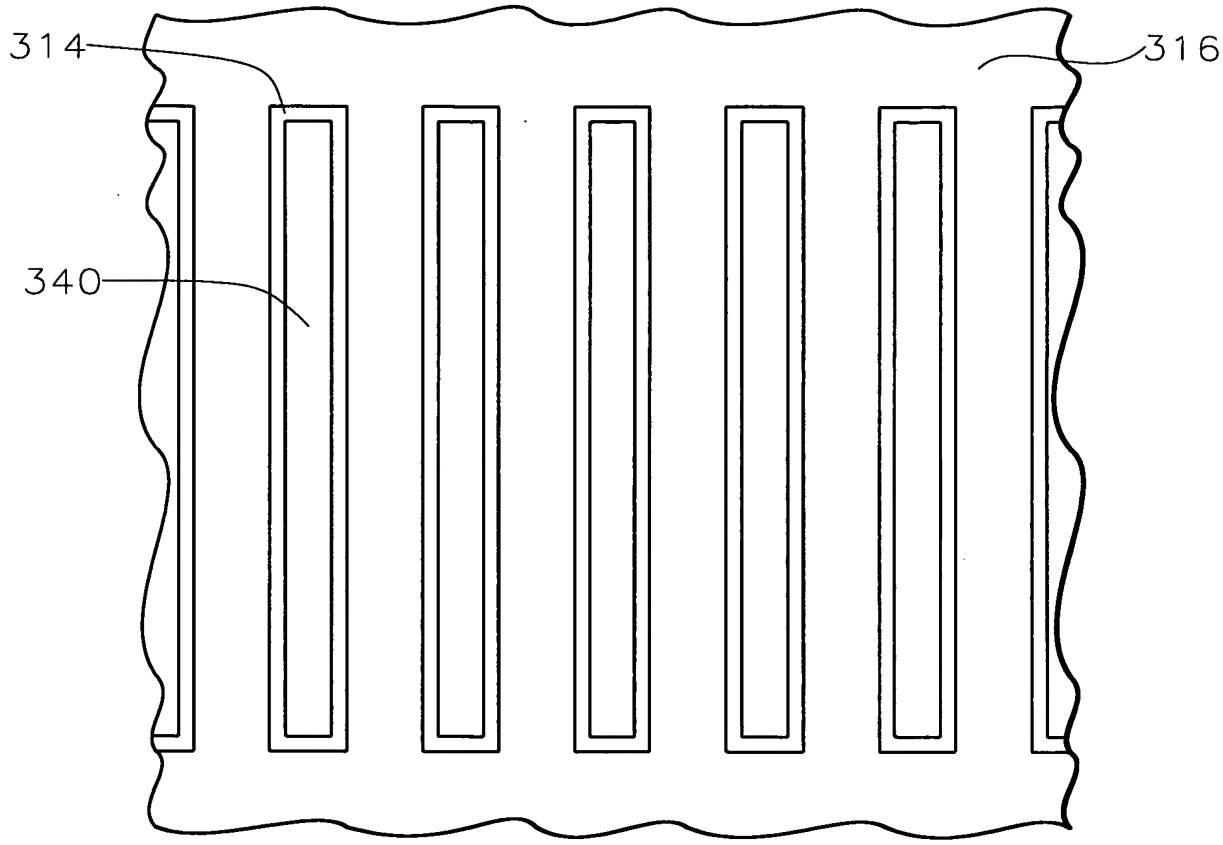

FIG. 33A

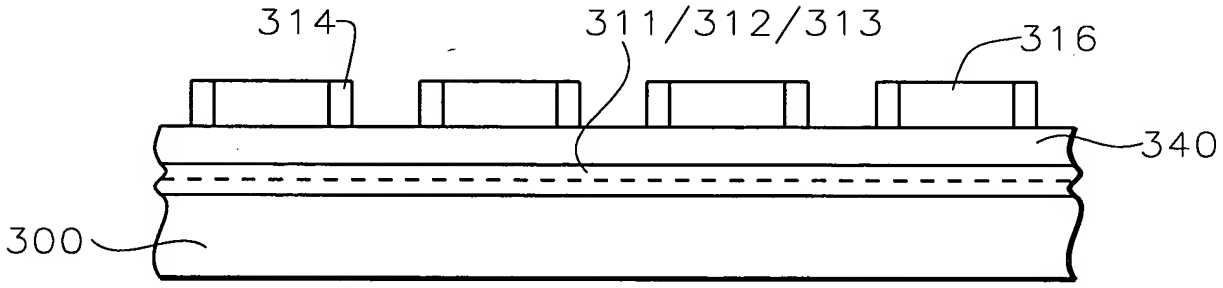

FIG. 33B

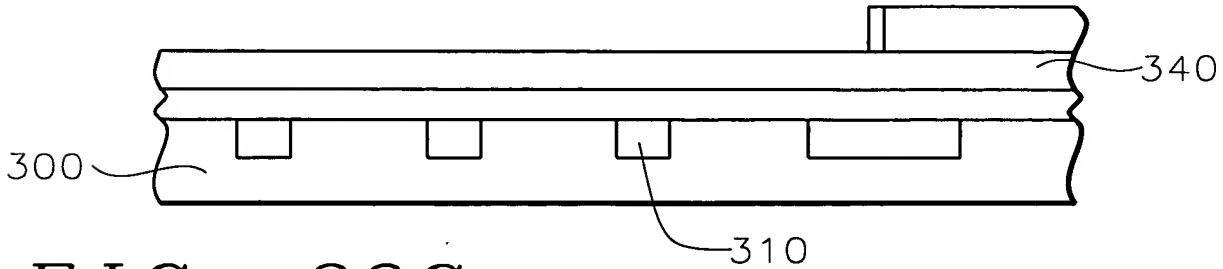

FIG. 33C

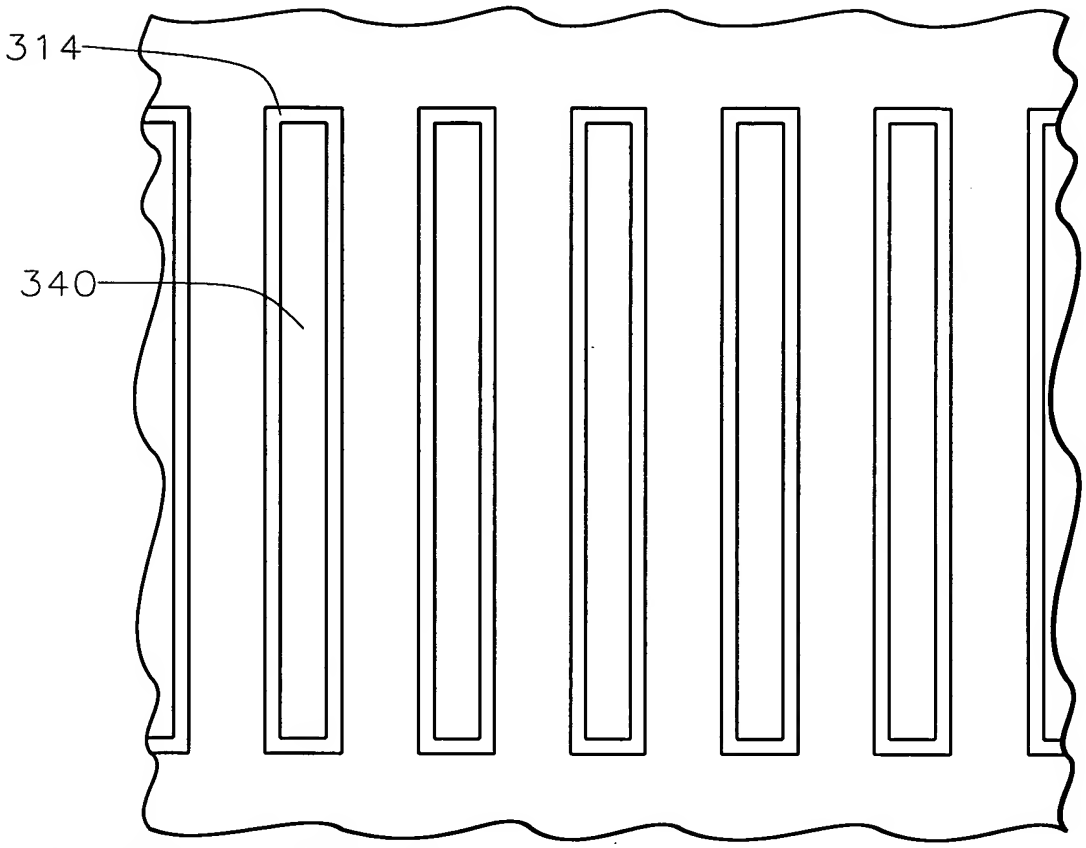

FIG. 34A

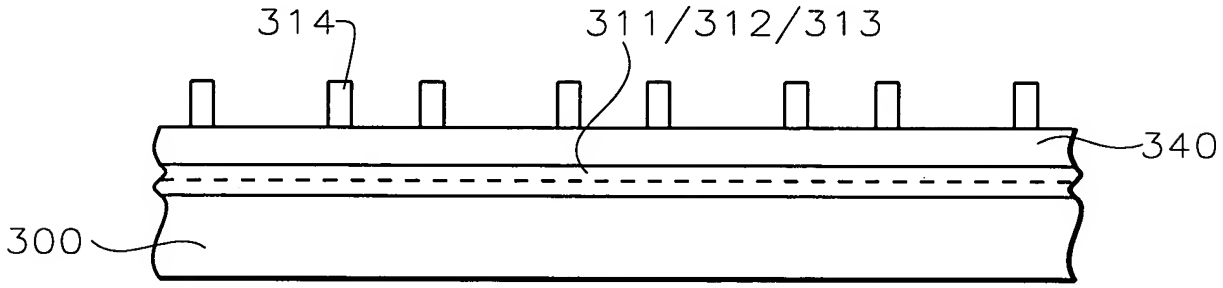

FIG. 34B

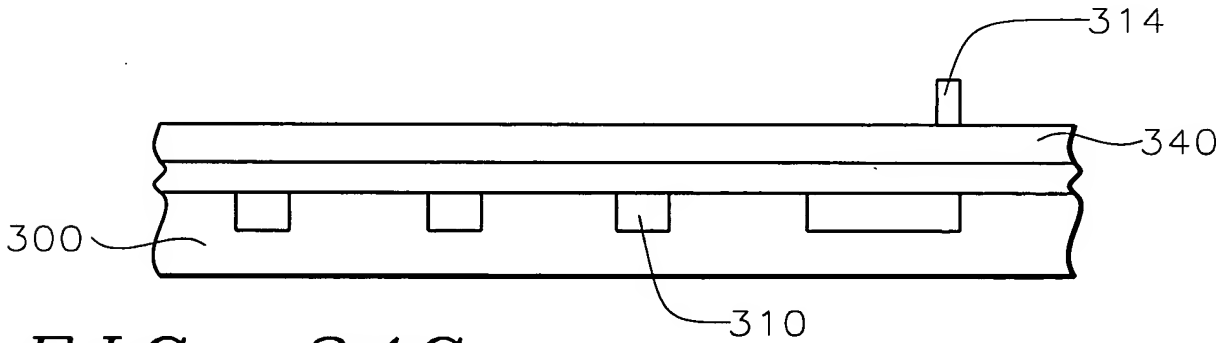

FIG. 34C

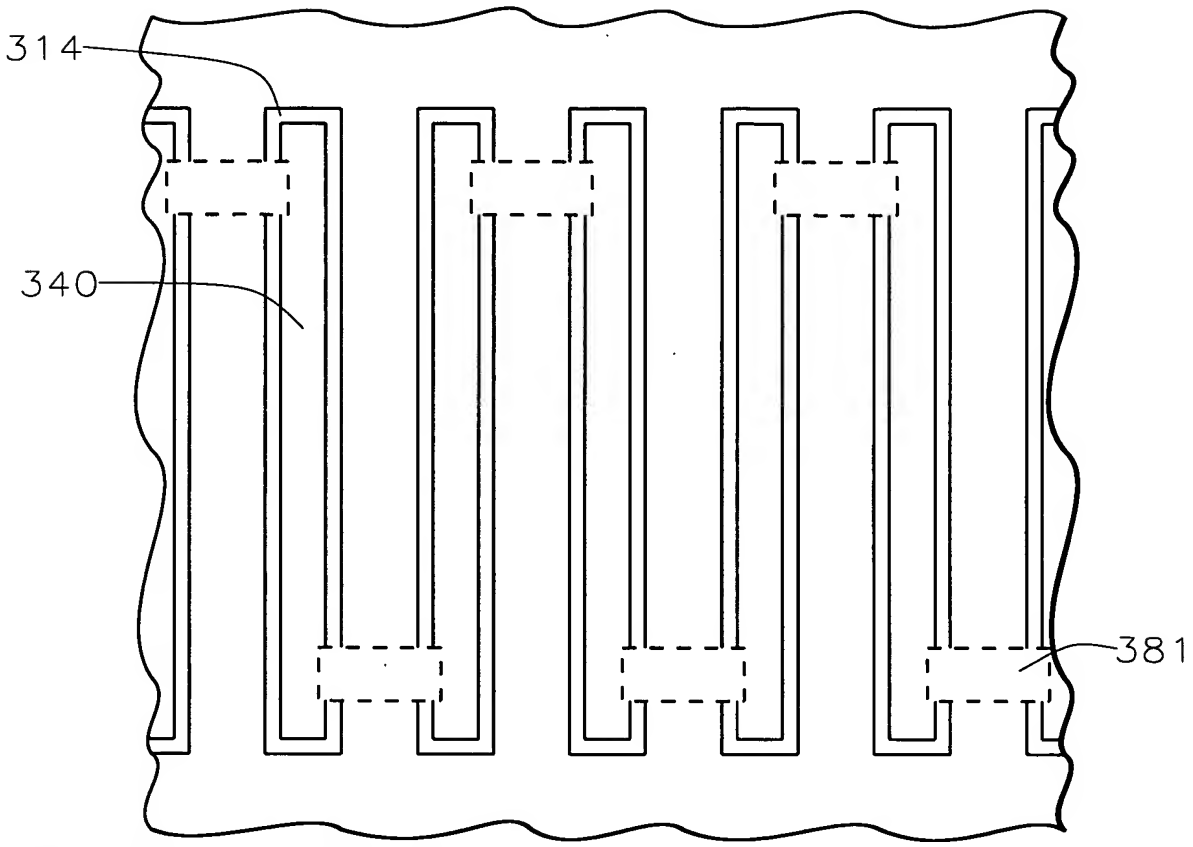

FIG. 35A

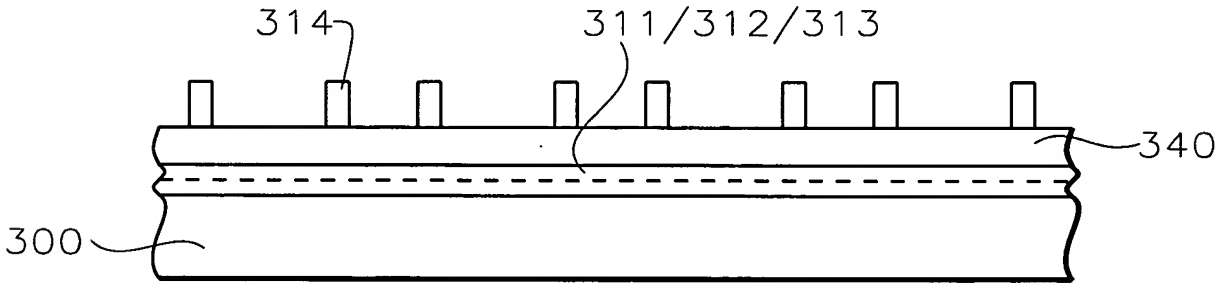

FIG. 35B

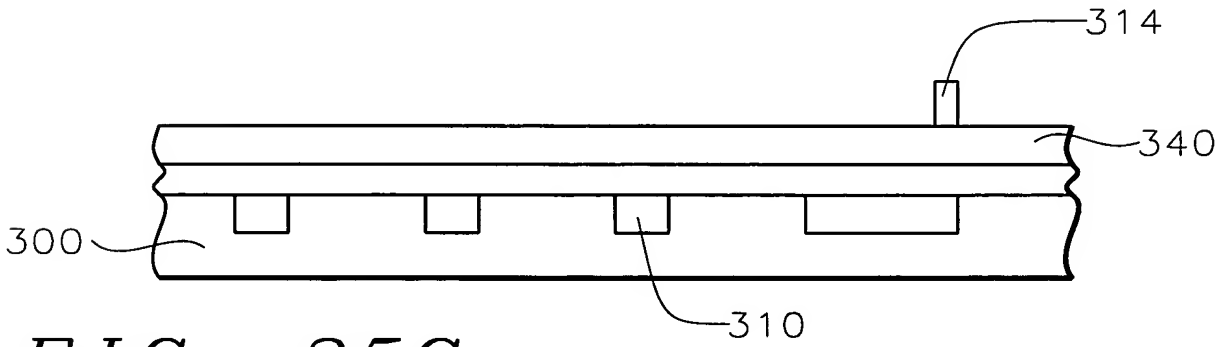

FIG. 35C

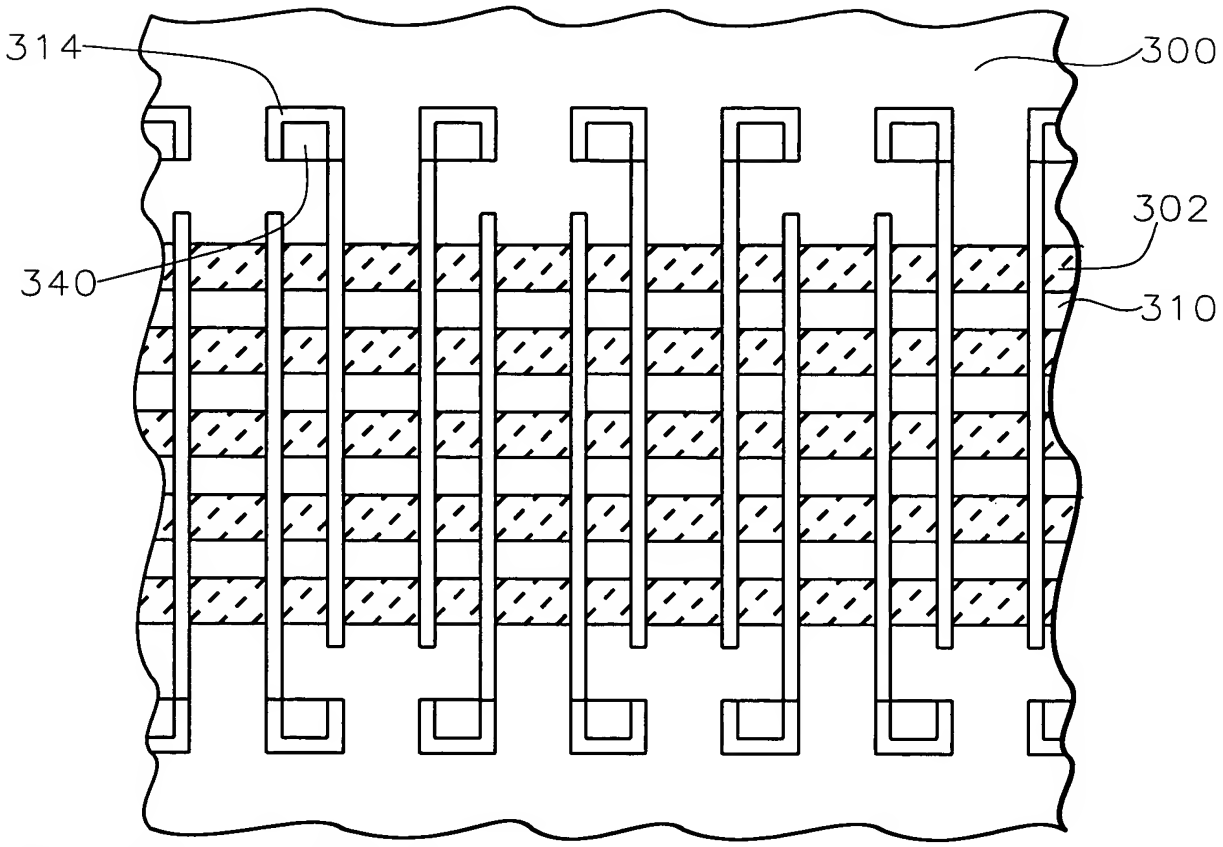

FIG. 36A

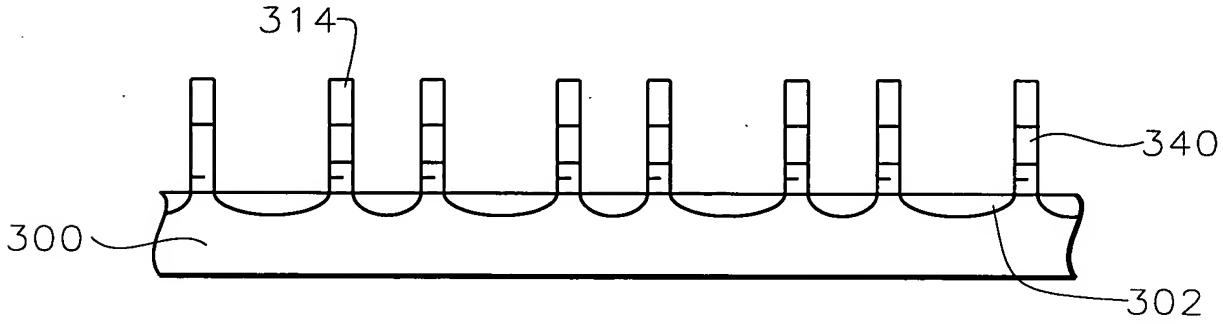

FIG. 36B

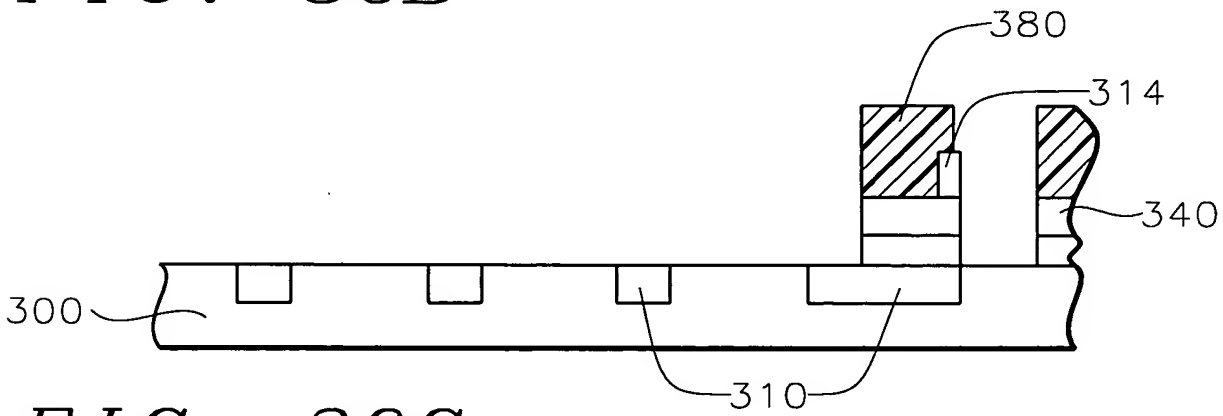

FIG. 36C

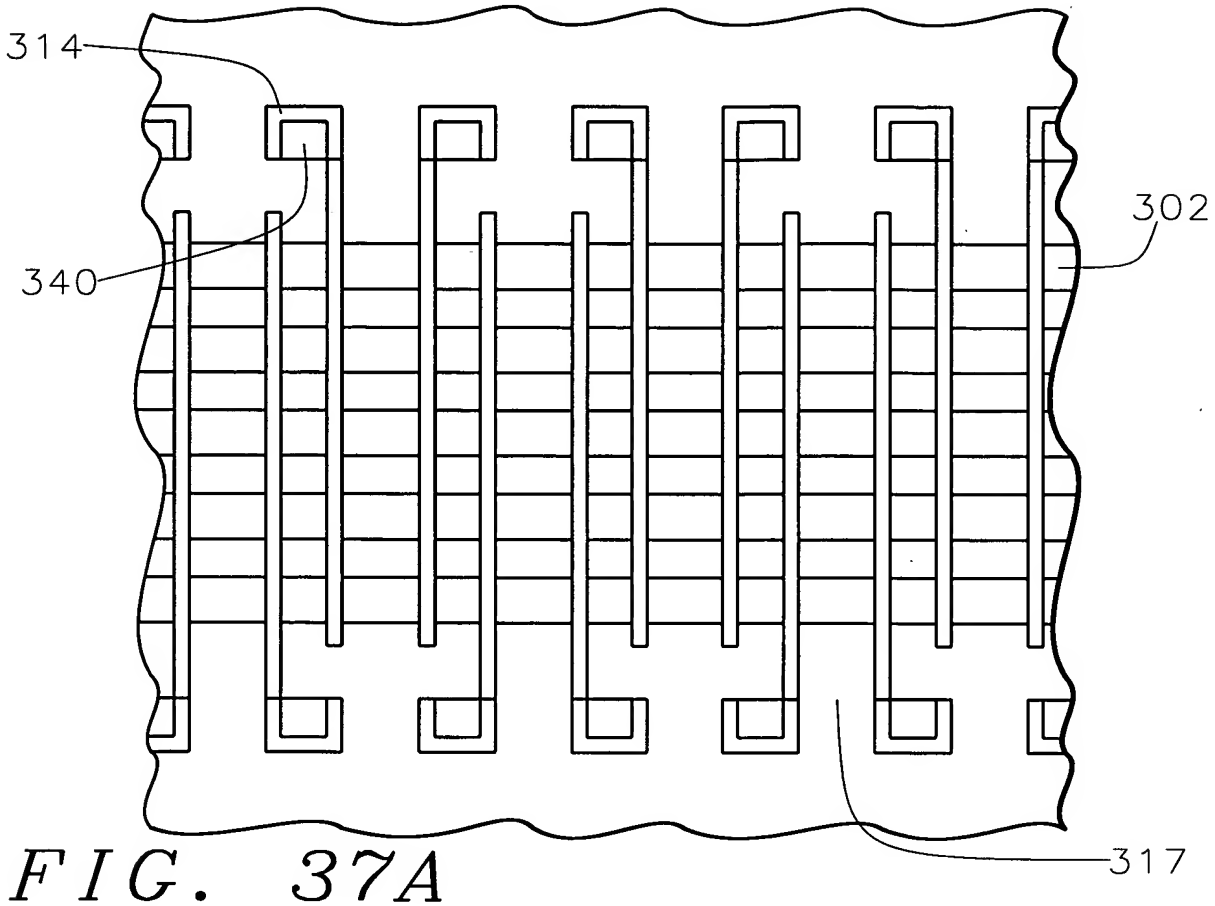

FIG. 37A

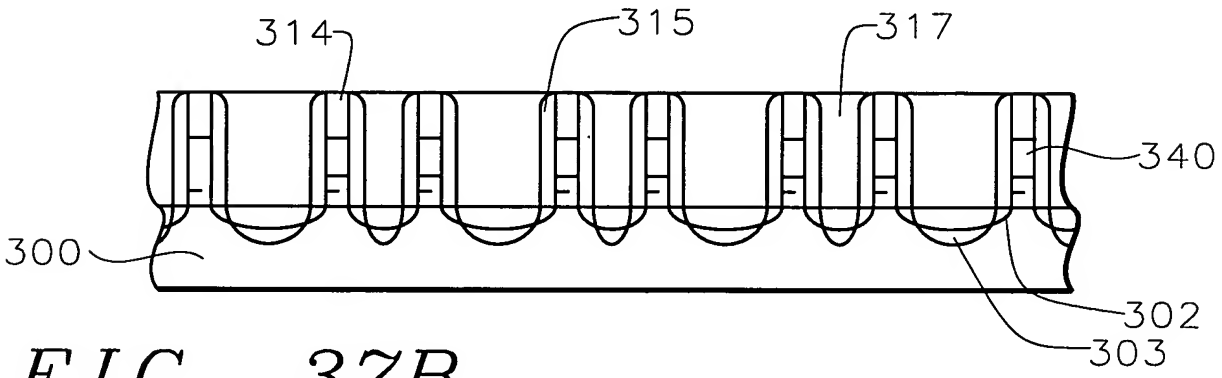

FIG. 37B

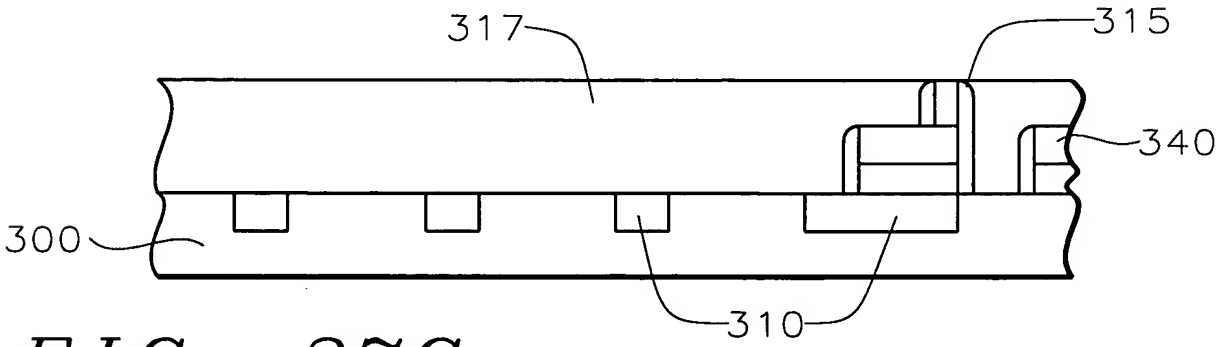

FIG. 37C

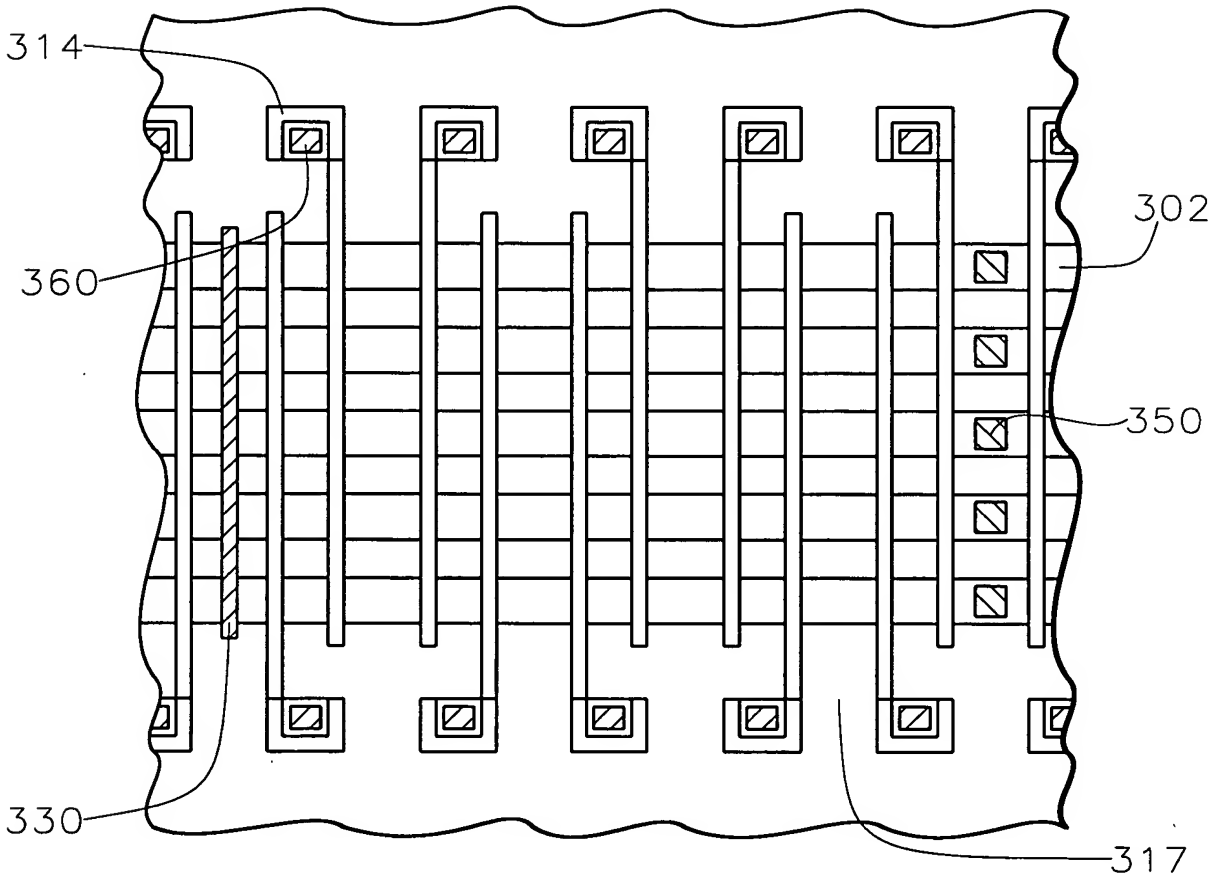

FIG. 38A

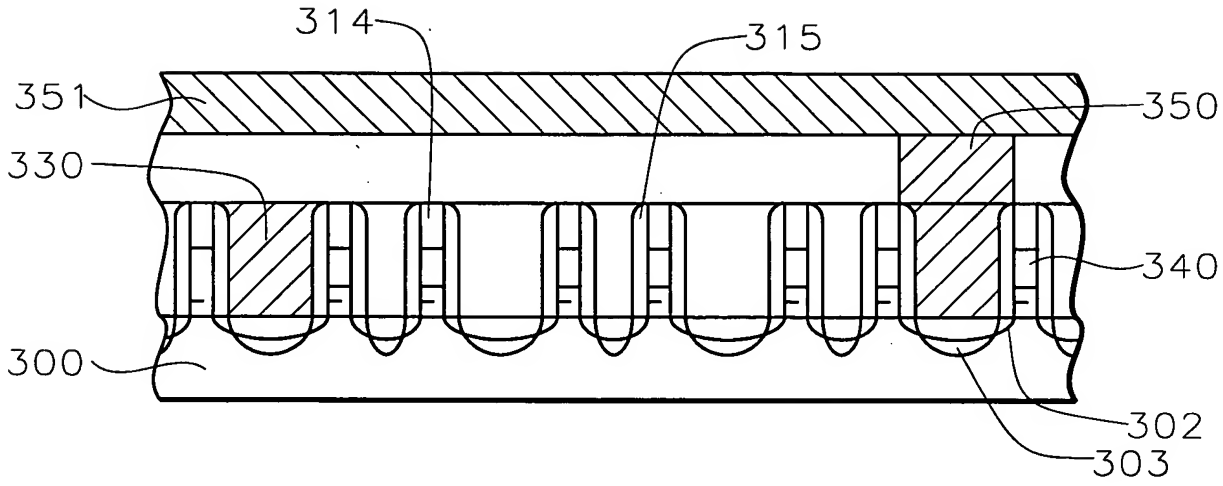

FIG. 38B

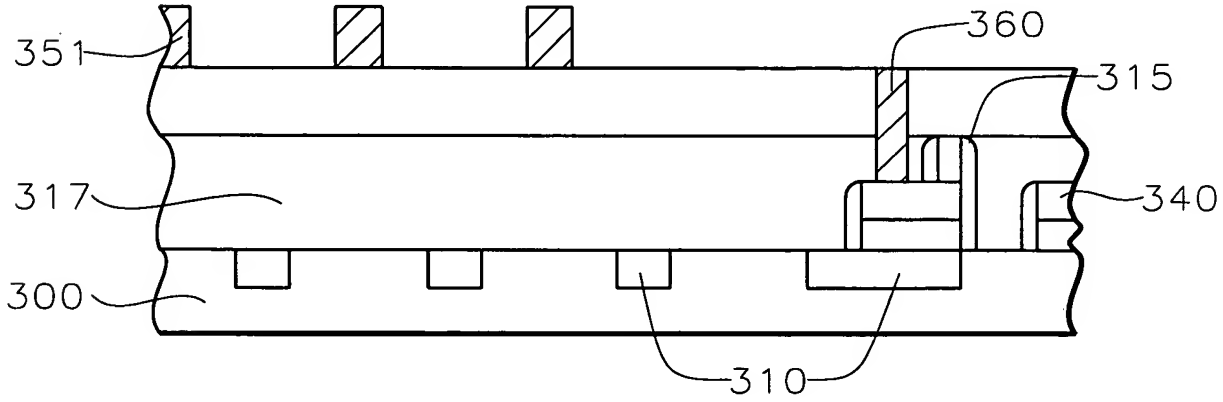

FIG. 38C

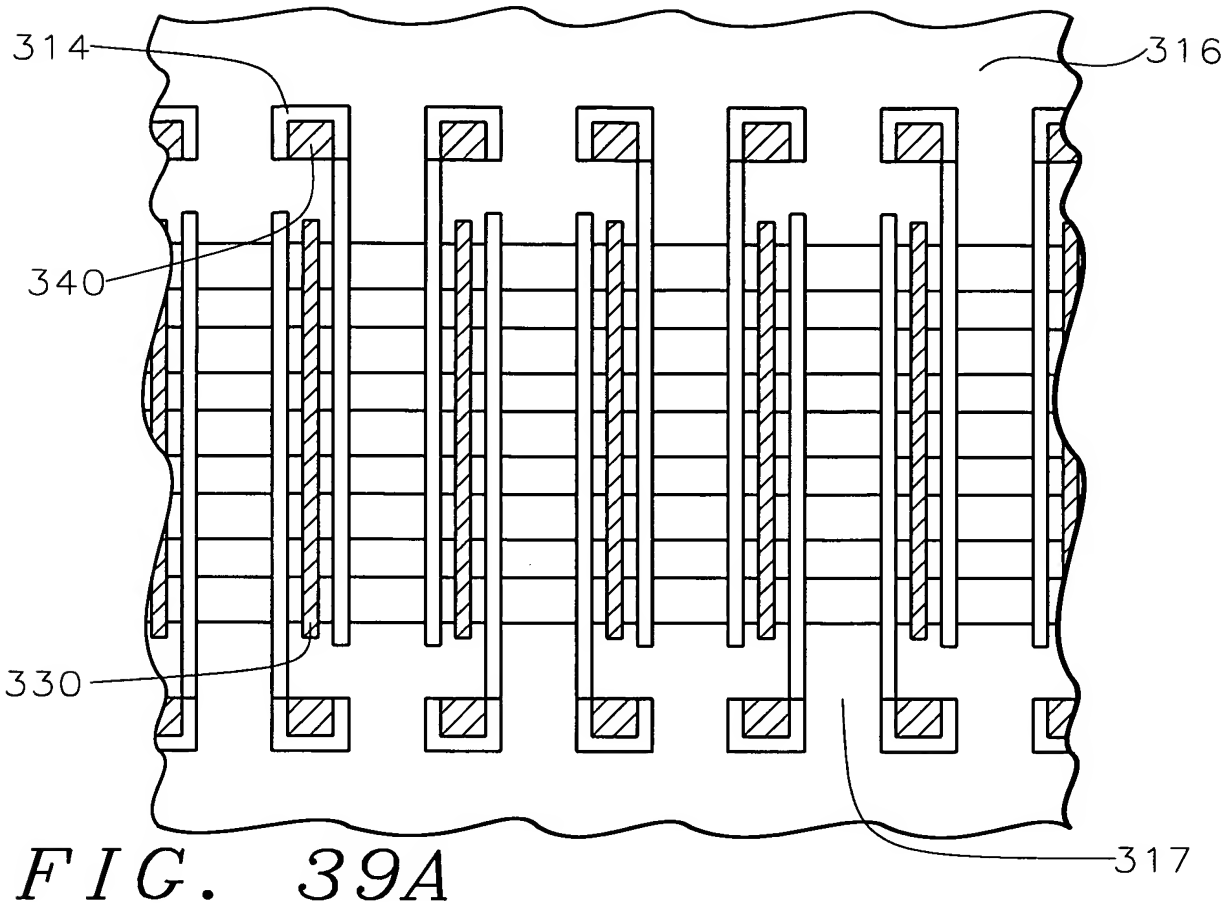

FIG. 39A

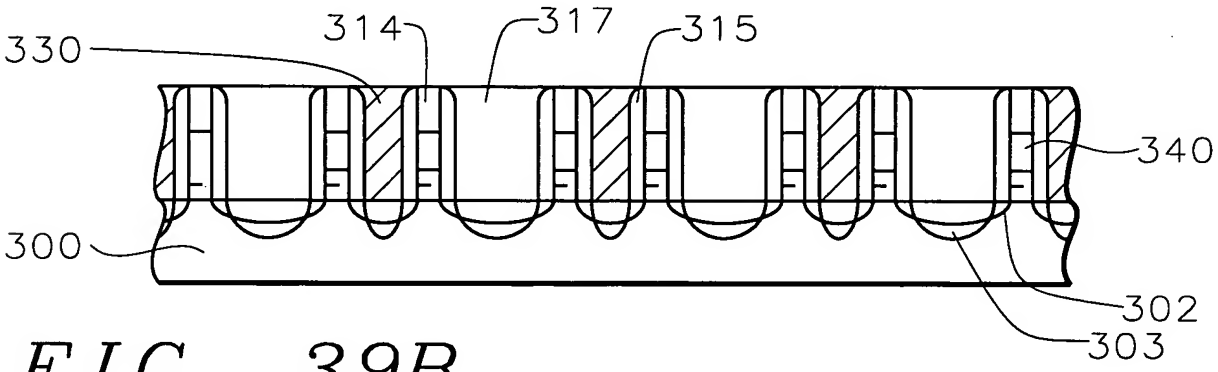

FIG. 39B

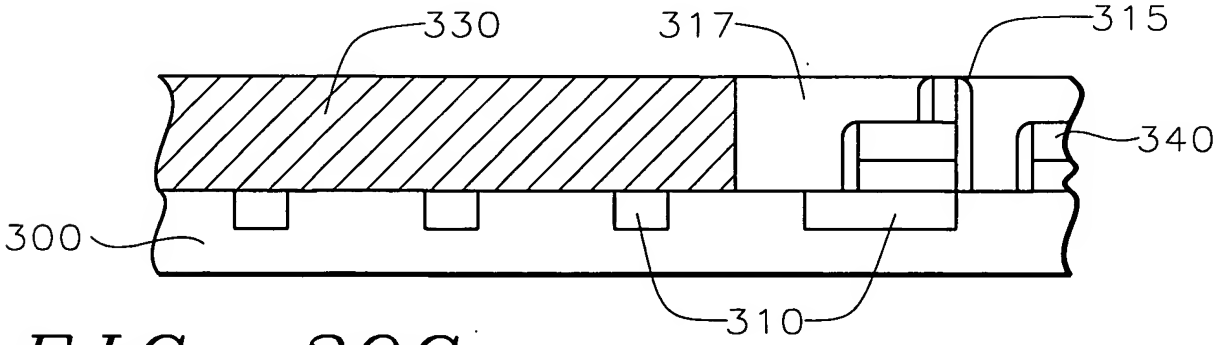

FIG. 39C

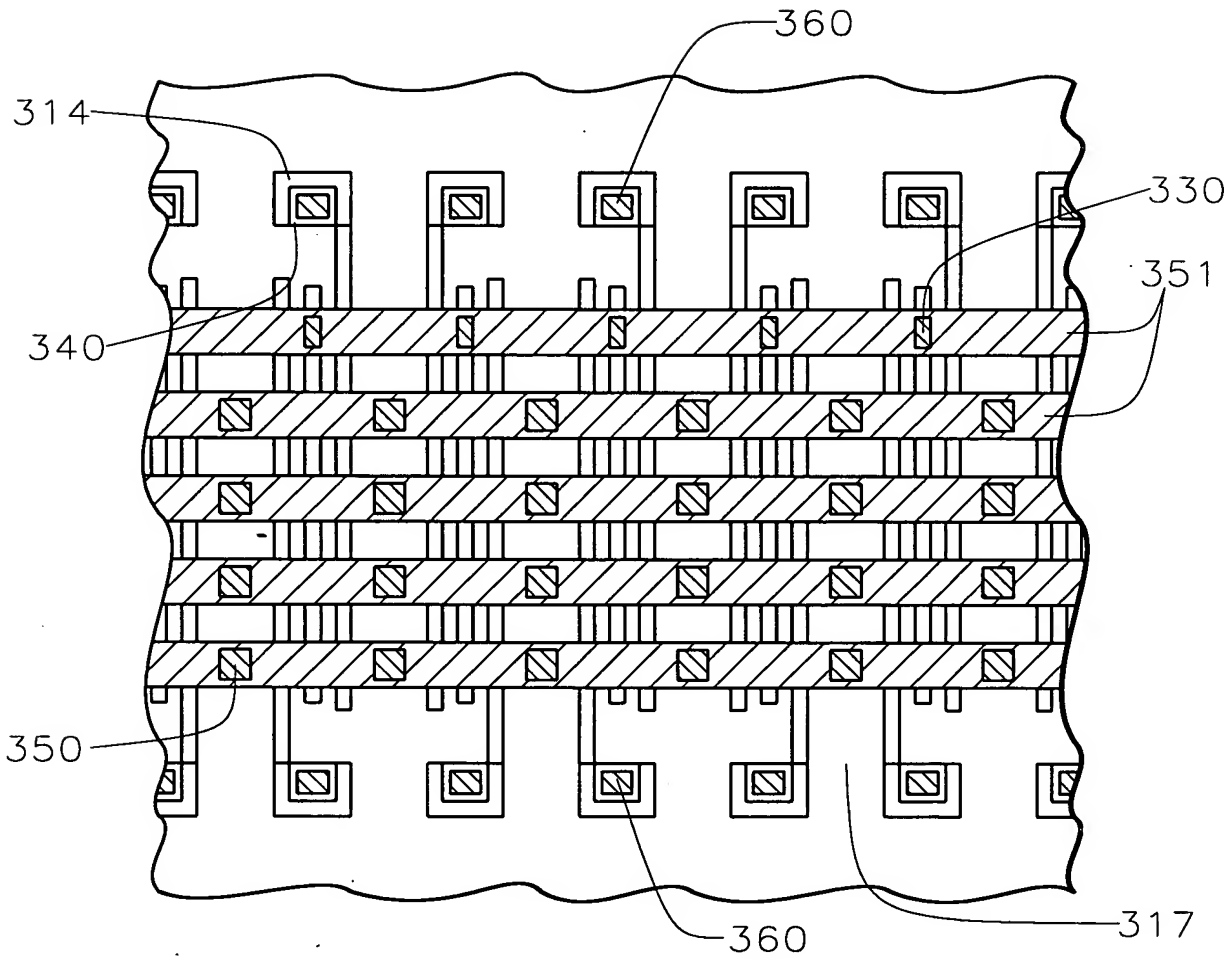

FIG. 40A

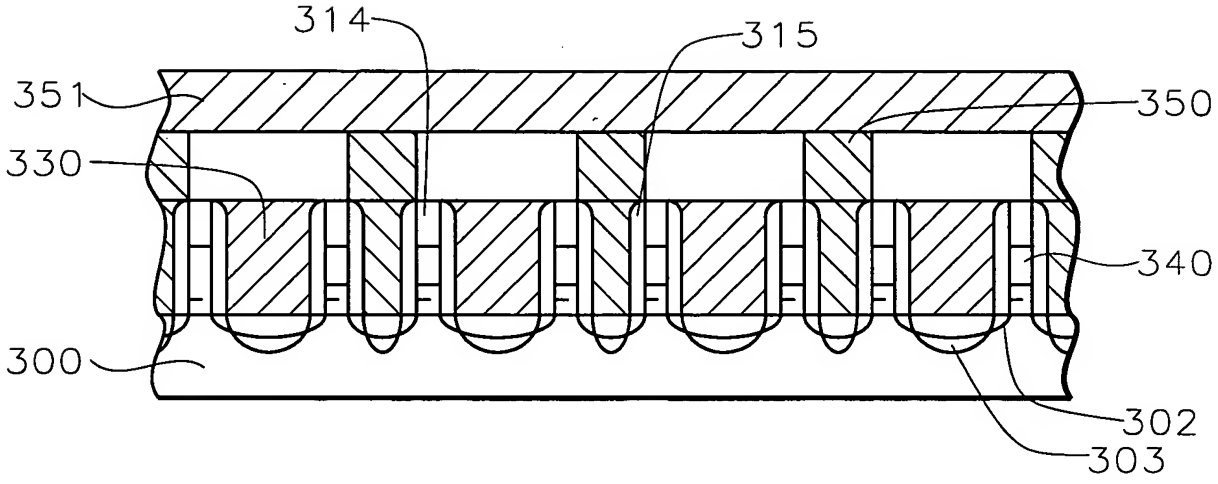

FIG. 40B

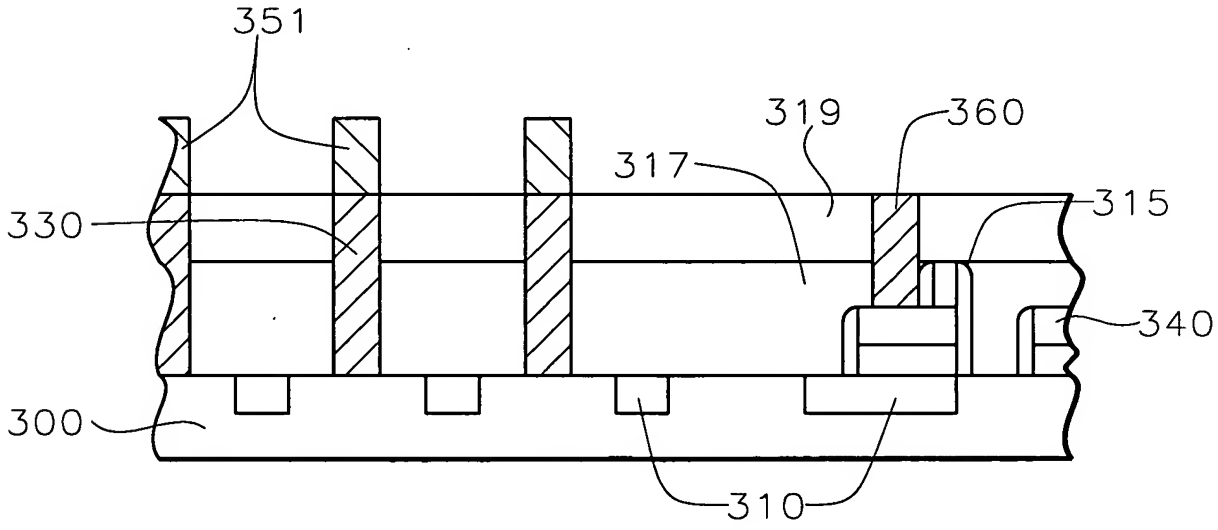

FIG. 40C

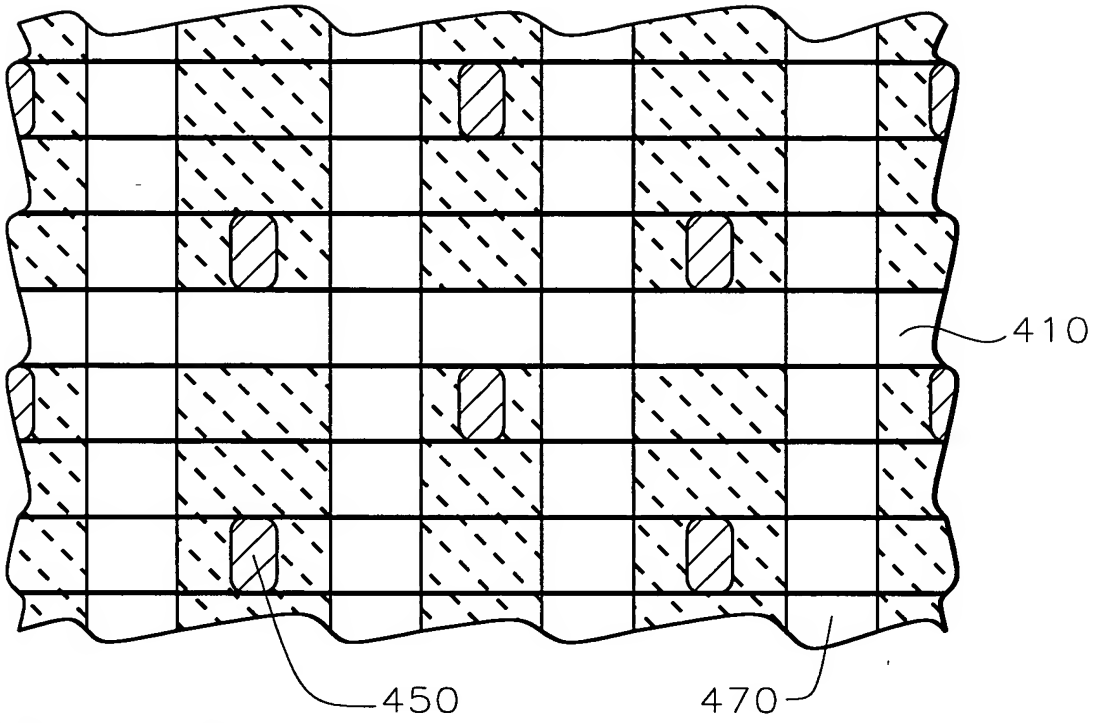

FIG. 41

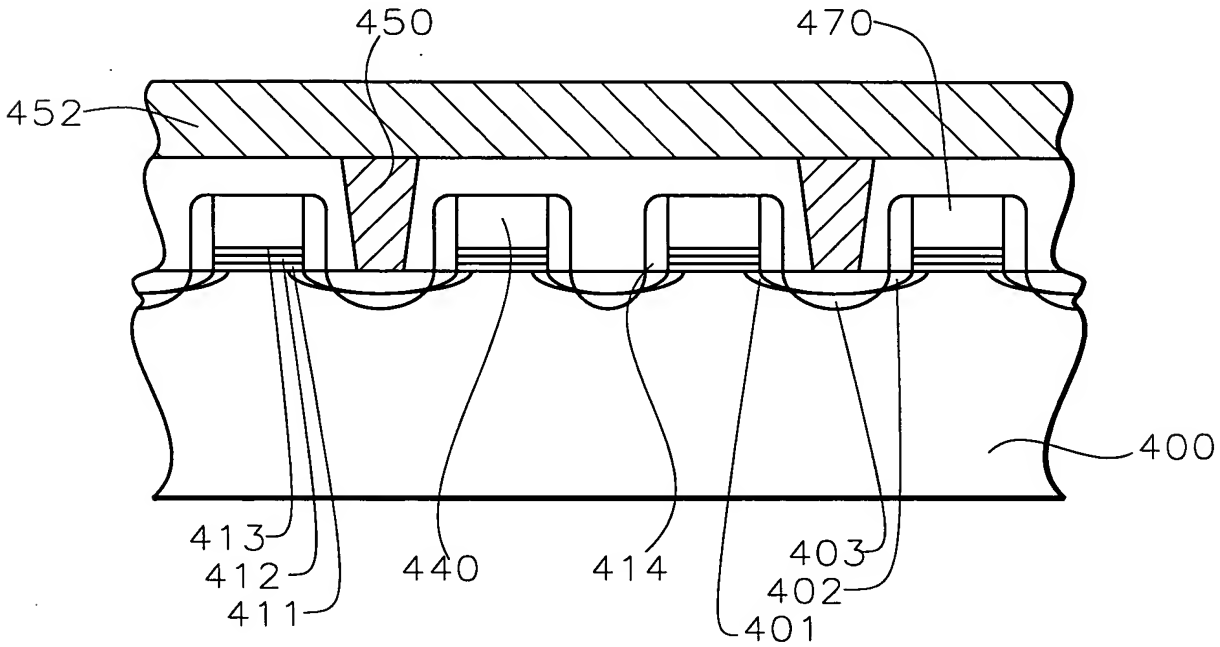

FIG. 42

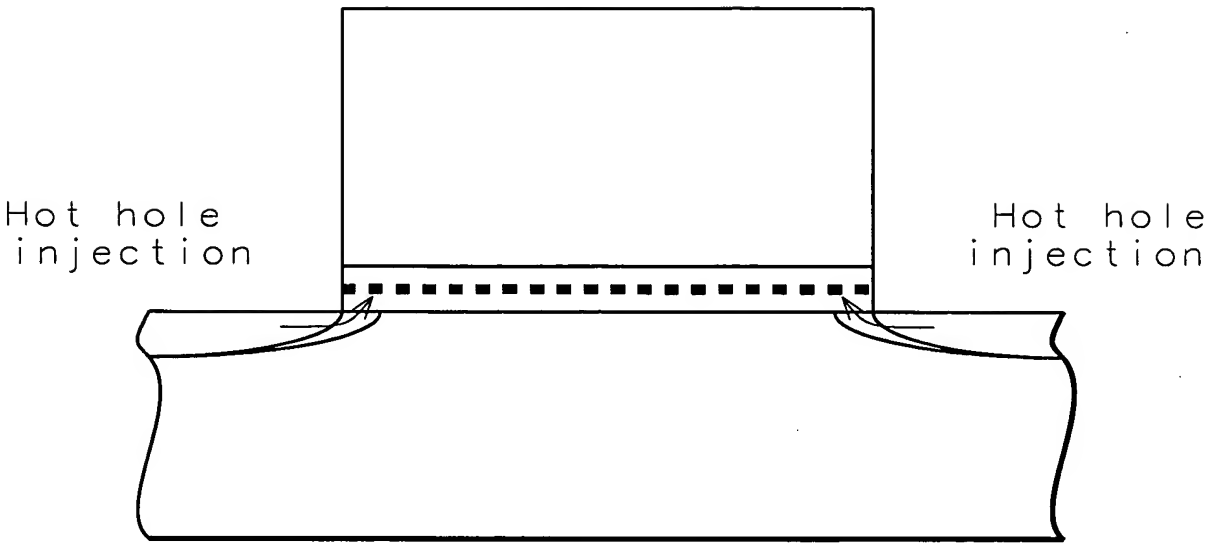
Hot hole
injection
Hot hole
injection

FIG. 43

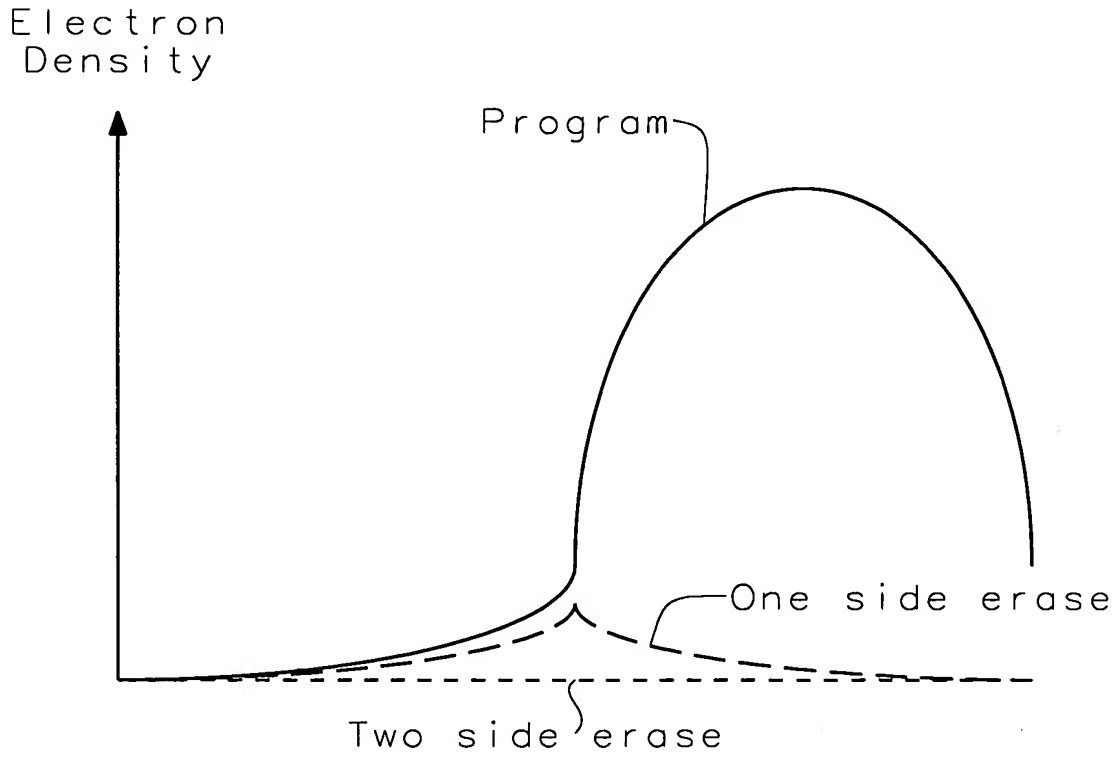
Electron
Density
Program
One side erase
Two side erase

FIG. 44